- (c) Except as provided in §§2.4 and 2.5(b), and paragraph (d) of this section, a director, officer, employee, or principal shareholder of a national bank, or an entity in which such person owns an interest of more than ten percent, may not retain commissions or other income from the sale of credit life insurance in connection with any loan made by that bank, and income from credit life insurance sales to loan customers must be credited to the income accounts of the bank.
- (d) The requirements of paragraph (c) of this section do not apply to a director, officer, employee, or principal shareholder if:
- (1) The person is employed by a third party that has contracted with the bank on an arm's-length basis to sell financial products on bank premises; and
- (2) The person is not involved in the bank's credit decision process.

$\S 2.4$ Bonus and incentive plans.

A bank employee or officer may participate in a bonus or incentive plan based on the sale of credit life insurance if payments to the employee or officer in any one year do not exceed the greater of:

- (a) Five percent of the recipient's annual salary; or
- (b) Five percent of the average salary of all loan officers participating in the plan.

§2.5 Bank compensation.

- (a) Nothing contained in this part prohibits a bank employee, officer, director, or principal shareholder who holds an insurance agent's license from agreeing to compensate the bank for the use of its premises, employees, or good will. However, the employee, officer, director, or principal shareholder shall turn over to the bank as compensation all income received from the sale of the credit life insurance to the bank's loan customers.
- (b) Income derived from credit life insurance sales to loan customers may be credited to an affiliate operating under the Bank Holding Company Act of 1956, 12 U.S.C. 1841 *et seq.*, or to a trust for the benefit of all shareholders, provided that the bank receives reasonable compensation in recognition of the role

played by its personnel, premises, and good will in credit life insurance sales. Reasonable compensation generally means an amount equivalent to at least 20 percent of the affiliate's net income attributable to the bank's credit life insurance sales.

PART 3—CAPITAL ADEQUACY STANDARDS

Subpart A—General Provisions

Sec.

- 3.1 Purpose, applicability, reservations of authority, and timing.
- 3.2 Definitions.
- 3.3 Operational requirements for certain exposures.
- 3.4-3.9 [Reserved]

Subpart B—Capital Ratio Requirements and Buffers

- 3.10 Minimum capital requirements.
- 3.11 Capital conservation buffer and countercyclical capital buffer amount.
- 3.12-3.19 [Reserved]

Subpart C—Definition of Capital

- 3.20 Capital components and eligibility criteria for regulatory capital instruments.
- 3.21 Minority interest.
- 3.22 Regulatory capital adjustments and deductions.
- 3.23-3.29 [Reserved]

Subpart D—Risk-weighted Assets— Standardized Approach

3.30 Applicability.

RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

- 3.31 Mechanics for calculating risk-weighted assets for general credit risk.
- 3.32 General risk weights.
- 3.33 Off-balance sheet exposures.
- 3.34 OTC derivative contracts.
- 3.35 Cleared transactions.
- 3.36 Guarantees and credit derivatives: Substitution treatment.
- 3.37 Collateralized transactions.

RISK-WEIGHTED ASSETS FOR UNSETTLED TRANSACTIONS

3.38 Unsettled transactions. 3.39–3.40 [Reserved]

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

3.41 Operational requirements for securitization exposures.

12 CFR Ch. I (1-1-14 Edition)

Pt. 3

- 3.42 Risk-weighted assets for securitization exposures.
- 3.43 Simplified supervisory formula approach (SSFA) and the gross-up approach.
- 3.44 Securitization exposures to which the SSFA and gross-up approach do not apply.
- 3.45 Recognition of credit risk mitigants for securitization exposures.
- 3.46-3.50 [Reserved]

RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

- 3.51 Introduction and exposure measurement.
- $3.52 \quad \text{Simple risk-weight approach (SRWA)}.$
- 3.53 Equity exposures to investment funds.
- 3.54-3.60 [Reserved]

DISCLOSURES

- 3.61 Purpose and scope.
- 3.62 Disclosure requirements.
- 3.63 Disclosures by national banks or Federal savings associations described in §3.61.
- 3.64-3.99 [Reserved]

Subpart E—Risk-Weighted Assets—Internal Ratings-Based and Advanced Measurement Approaches

- 3.100 Purpose, applicability, and principle of conservatism.
- 3.101 Definitions.
- 3.102-3.120 [Reserved]

QUALIFICATION

- 3.121 Qualification process.
- 3.122 Qualification requirements.
- 3.123 Ongoing qualification.
- 3.124 Merger and acquisition transitional arrangements.
- 3.125-3.130 [Reserved]

RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

- 3.131 Mechanics for calculating total wholesale and retail risk-weighted assets.
- 3.132 Counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts
- 3.133 Cleared transactions.
- 3.134 Guarantees and credit derivatives: PD substitution and LGD adjustment approaches.
- 3.135 Guarantees and credit derivatives: Double default treatment.
- 3.136 Unsettled transactions.
- 3.137-3.140 [Reserved]

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

3.141 Operational criteria for recognizing the transfer of risk.

- 3.142 Risk-weighted assets for securitization exposures.
- 3.143 Supervisory formula approach (SFA).
- 3.144 Simplified supervisory formula approach (SSFA).
- 3.145 Recognition of credit risk mitigants for securitization exposures.
- 3.146-3.150 [Reserved]

RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

- 3.151 Introduction and exposure measurement.
- 3.152 Simple risk weight approach (SRWA).
- 3.153 Internal models approach (IMA).
- 3.154 Equity exposures to investment funds.
- 3.155 Equity derivative contracts.
- 3.166-3.160 [Reserved]

RISK-WEIGHTED ASSETS FOR OPERATIONAL RISK

- 3.161 Qualification requirements for incorporation of operational risk mitigants.
- 3.162 Mechanics of risk-weighted asset calculation.
- 3.163-3.170 [RESERVED]

DISCLOSURES

- 3.171 Purpose and scope.
- 3.172 Disclosure requirements.
- 3.173 Disclosures by certain advanced approaches national banks and Federal savings associations.
- 3.174–3.200 [Reserved]

Subpart F—Risk-weighted Assets—Market Risk

- 3.201 Purpose, applicability, and reservation of authority.
- 3.202 Definitions
- 3.203 Requirements for application of this subpart F.
- 3.204 Measure for market risk.
- 3.205 VaR-based measure.
- 3.206 Stressed VaR-based measure.
- 3.207 Specific risk.
- 3.208 Incremental risk.
- 3.209 Comprehensive risk.
- 3.210 Standardized measurement method for specific risk.
- 3.211 Simplified supervisory formula approach (SSFA).
- 3.212 Market risk disclosures.
- 3.213-3.299 [Reserved]

Subpart G—Transition Provisions

3.300 Transitions.

Subpart H—Establishment of Minimum Capital Ratios for an Individual Bank or Individual Federal Savings Association

- 3.401 Purpose and scope.
- 3.402 Applicability.

- 3.403 Standards for determination of appropriate individual minimum capital ratios.
- 3.404 Procedures.
- 3.405 Relation to other actions.

Subpart I—Enforcement

3.501 Remedies.

Subpart J—Issuance of a Directive

- 3.601 Purpose and scope.
- 3.602 Notice of intent to issue a directive.
- 3.603 Response to notice.
- 3.604 Decision.
- 3 605 Issuance of a directive.
- 3.606 Change in circumstances
- 3.607 Relation to other administrative actions

Subpart K—Interpretations

3.701 Capital and surplus.

APPENDIX A TO PART 3—RISK-BASED CAPITAL GUIDELINES

APPENDIX B TO PART 3— RISK-BASED CAPITAL GUIDELINES: MARKET RISK

AUTHORITY: 12 U.S.C. 93a, 161, 1462, 1462a, 1463, 1464, 1818, 1828(n), 1828 note, 1831n note, 1835, 3907, 3909, and 5412(b)(2)(B).

SOURCE: 50 FR 10216, Mar. 14, 1985, unless otherwise noted.

Subpart A—General Provisions

Source: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§3.1 Purpose, applicability, reservations of authority, and timing.

- (a) Purpose. This part establishes minimum capital requirements and overall capital adequacy standards for national banks or Federal savings associations. This part includes methodologies for calculating minimum capital requirements, public disclosure requirements related to the capital requirements, and transition provisions for the application of this part.
- (b) Limitation of authority. Nothing in this part shall be read to limit the authority of the OCC to take action under other provisions of law, including action to address unsafe or unsound practices or conditions, deficient capital levels, or violations of law or regulation, under section 8 of the Federal Deposit Insurance Act.

- (c) Applicability. Subject to the requirements in paragraphs (d) and (f) of this section:
- (1) Minimum capital requirements and overall capital adequacy standards. Each national bank or Federal savings association must calculate its minimum capital requirements and meet the overall capital adequacy standards in subpart B of this part.
- (2) Regulatory capital. Each national bank or Federal savings association must calculate its regulatory capital in accordance with subpart C of this part.
- (3) Risk-weighted assets. (i) Each national bank or Federal savings association must use the methodologies in subpart D of this part (and subpart F of this part for a market risk national bank or Federal savings association) to calculate standardized total risk-weighted assets.
- (ii) Each advanced approaches national bank or Federal savings association must use the methodologies in subpart E (and subpart F of this part for a market risk national bank or Federal savings association) to calculate advanced approaches total risk-weighted assets.
- (4) Disclosures. (i) Except for an advanced approaches national bank or Federal savings association that is making public disclosures pursuant to the requirements in subpart E of this part, each national bank or Federal savings association with total consolidated assets of \$50 billion or more must make the public disclosures described in subpart D of this part.
- (ii) Each market risk national bank or Federal savings association must make the public disclosures described in subpart F of this part.
- (iii) Each advanced approaches national bank or Federal savings association must make the public disclosures described in subpart E of this part.
- (d) Reservation of authority—(1) Additional capital in the aggregate. The OCC may require a national bank or Federal savings association to hold an amount of regulatory capital greater than otherwise required under this part if the OCC determines that the national bank's or Federal savings association's capital requirements under this part

are not commensurate with the national bank's or Federal savings association's credit, market, operational, or other risks.

(2) Regulatory capital elements. (i) If the OCC determines that a particular common equity tier 1, additional tier 1, or tier 2 capital element has characteristics or terms that diminish its ability to absorb losses, or otherwise present safety and soundness concerns, the OCC may require the national bank or Federal savings association to exclude all or a portion of such element from common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, as appropriate.

(ii) Notwithstanding the criteria for regulatory capital instruments set forth in subpart C of this part, the OCC may find that a capital element may be included in a national bank's or Federal savings association's common equity tier 1 capital, additional tier 1 capital, or tier 2 capital on a permanent or temporary basis consistent with the loss absorption capacity of the element and in accordance with §3.20(e).

(3) Risk-weighted asset amounts. If the OCC determines that the risk-weighted asset amount calculated under this part by the national bank or Federal savings association for one or more exposures is not commensurate with the risks associated with those exposures, the OCC may require the national bank or Federal savings association to assign a different risk-weighted asset amount to the exposure(s) or to deduct the amount of the exposure(s) from its regulatory capital.

(4) Total leverage. If the OCC determines that the leverage exposure amount, or the amount reflected in the national bank's or Federal savings association's reported average total consolidated assets, for an on- or off-balance sheet exposure calculated by a national bank or Federal savings association under §3.10 is inappropriate for the exposure(s) or the circumstances of the national bank or Federal savings association, the OCC may require the national bank or Federal savings association to adjust this exposure amount in the numerator and the denominator for purposes of the leverage ratio calculations.

(5) Consolidation of certain exposures. The OCC may determine that the riskbased capital treatment for an exposure or the treatment provided to an entity that is not consolidated on the national bank's or Federal savings association's balance sheet is not commensurate with the risk of the exposure and the relationship of the national bank or Federal savings association to the entity. Upon making this determination, the OCC may require the national bank or Federal savings association to treat the exposure or entity as if it were consolidated on the balance sheet of the national bank or Federal savings association for purposes of determining the national bank's or Federal savings association's risk-based capital requirements and calculating the national bank's or Federal savings association's risk-based capital ratios accordingly. The OCC will look to the substance of, and risk associated with, the transaction, as well as other relevant factors the OCC deems appropriate in determining whether to require such treatment.

(6) Other reservation of authority. With respect to any deduction or limitation required under this part, the OCC may require a different deduction or limitation, provided that such alternative deduction or limitation is commensurate with the national bank's or Federal savings association's risk and consistent with safety and soundness.

(e) Notice and response procedures. In making a determination under this section, the OCC will apply notice and response procedures in the same manner as the notice and response procedures in §3.404.

(f) Timing. (1) Subject to the transition provisions in subpart G of this part, an advanced approaches national bank or Federal savings association that is not a savings and loan holding company must:

(i) Except as described in paragraph (f)(1)(ii) of this section, beginning on January 1, 2014, calculate advanced approaches total risk-weighted assets in accordance with subpart E and, if applicable, subpart F of this part and, beginning on January 1, 2015, calculate standardized total risk-weighted assets in accordance with subpart D and, if applicable, subpart F of this part;

- (ii) From January 1, 2014 to December 31, 2014:
- (A) Calculate risk-weighted assets in accordance with the general risk-based capital rules under appendix A to this part and, if applicable, subpart F of this part (national banks), or 12 CFR part 167 and, if applicable, subpart F of this part (Federal savings associations) and substitute such risk-weighted assets for standardized total risk-weighted assets for purposes of § 3.10:
- (B) If applicable, calculate general market risk equivalent assets in accordance with appendix B to this part, section 4(a)(3) (national banks) and substitute such general market risk equivalent assets for standardized market risk-weighted assets for purposes of §3.20(d)(3); and
- (C) Substitute the corresponding provision or provisions of appendix A to this part, and, if applicable, appendix B to this part (national banks), or 12 CFR part 167 (Federal savings associations) for any reference to subpart D of this part in: §3.121(c); §3.124(a) and (b); §3.144(b); §3.154(c) and (d); §3.202(b) (definition of covered position in paragraph (b)(3)(iv)); and §3.211(b);²
- (iii) Beginning on January 1, 2014, calculate and maintain minimum cap-

¹For the purpose of calculating its general risk-based capital ratios from January 1, 2014 to December 31, 2014, an advanced approaches national bank or Federal savings association shall adjust, as appropriate, its risk-weighted asset measure (as that amount is calculated under appendix A to this part, Sec. 3 and, if applicable, subpart F of this part (national banks), or 12 CFR part 167 and, if applicable, subpart F of this part (Federal savings associations) in the general risk-based capital rules) by excluding those assets that are deducted from its regulatory capital under §3.22.

²In addition, for purposes of §3.201(c)(3), from January 1, 2014 to December 31, 2014, for any circumstance in which the OCC may require a national bank or Federal savings association to calculate risk-based capital requirements for specific positions or portfolios under subpart D of this part, the OCC will instead require the national bank or Federal savings association to make such calculations according to appendix A to this part and, if applicable, subpart F of this part (national banks), or 12 CFR part 167 and, if applicable, subpart F of this part (Federal savings associations).

- ital ratios in accordance with subparts A, B, and C of this part, provided, however, that such national bank or Federal savings association must:
- (A) From January 1, 2014 to December 31, 2014, maintain a minimum common equity tier 1 capital ratio of 4 percent, a minimum tier 1 capital ratio of 5.5 percent, a minimum total capital ratio of 8 percent, and a minimum leverage ratio of 4 percent; and
- (B) From January 1, 2015 to December 31, 2017, an advanced approaches national bank or Federal savings association:
- (1) Is not required to maintain a supplementary leverage ratio; and
- (2) Must calculate a supplementary leverage ratio in accordance with §3.10(c), and must report the calculated supplementary leverage ratio on any applicable regulatory reports.
- (2) Subject to the transition provisions in subpart G of this part, a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association or a savings and loan holding company that is an advanced approaches national bank or Federal savings association must:
- (i) Beginning on January 1, 2015, calculate standardized total risk-weighted assets in accordance with subpart D, and if applicable, subpart F of this part; and
- (ii) Beginning on January 1, 2015, calculate and maintain minimum capital ratios in accordance with subparts A, B and C of this part, provided, however, that from January 1, 2015 to December 31, 2017, a savings and loan holding company that is an advanced approaches national bank or Federal savings association:
- (A) Is not required to maintain a supplementary leverage ratio; and
- (B) Must calculate a supplementary leverage ratio in accordance with §3.10(c), and must report the calculated supplementary leverage ratio on any applicable regulatory reports.
- (3) Beginning on January 1, 2016, and subject to the transition provisions in subpart G of this part, a national bank or Federal savings association is subject to limitations on distributions and discretionary bonus payments with respect to its capital conservation buffer

and any applicable countercyclical capital buffer amount, in accordance with subpart B of this part.

(4) No national bank or Federal savings association that is not an advanced approaches bank or advanced approaches savings association is subject to this part 3 until January 1, 2015.

§ 3.2 Definitions.

As used in this part:

Additional tier \hat{l} capital is defined in §3.20(c).

Advanced approaches national bank or Federal savings association means a national bank or Federal savings association that is described in §3.100(b)(1).

Advanced approaches total risk-weighted assets means:

- (1) The sum of:
- (i) Credit-risk-weighted assets;
- (ii) Credit valuation adjustment (CVA) risk-weighted assets;
- (iii) Risk-weighted assets for operational risk; and
- (iv) For a market risk national bank or Federal savings association only, advanced market risk-weighted assets; minus
- (2) Excess eligible credit reserves not included in the national bank's or Federal savings association's tier 2 capital.

Advanced market risk-weighted assets means the advanced measure for market risk calculated under §3.204 multiplied by 12.5.

Affiliate with respect to a company, means any company that controls, is controlled by, or is under common control with, the company.

Allocated transfer risk reserves means reserves that have been established in accordance with section 905(a) of the International Lending Supervision Act, against certain assets whose value U.S. supervisory authorities have found to be significantly impaired by protracted transfer risk problems.

Allowances for loan and lease losses (ALLL) means valuation allowances that have been established through a charge against earnings to cover estimated credit losses on loans, lease financing receivables or other extensions of credit as determined in accordance with GAAP. ALLL excludes "allocated transfer risk reserves." For purposes of this part, ALLL includes allowances that have been established through a

charge against earnings to cover estimated credit losses associated with offbalance sheet credit exposures as determined in accordance with GAAP.

Asset-backed commercial paper (ABCP) program means a program established primarily for the purpose of issuing commercial paper that is investment grade and backed by underlying exposures held in a bankruptcy-remote special purpose entity (SPE).

Asset-backed commercial paper (ABCP) program sponsor means a national bank or Federal savings association that:

- (1) Establishes an ABCP program;
- (2) Approves the sellers permitted to participate in an ABCP program;
- (3) Approves the exposures to be purchased by an ABCP program; or
- (4) Administers the ABCP program by monitoring the underlying exposures, underwriting or otherwise arranging for the placement of debt or other obligations issued by the program, compiling monthly reports, or ensuring compliance with the program documents and with the program's credit and investment policy.

Bank holding company means a bank holding company as defined in section 2 of the Bank Holding Company Act.

Bank Holding Company Act means the Bank Holding Company Act of 1956, as amended (12 U.S.C. 1841 et seq.).

Bankruptcy remote means, with respect to an entity or asset, that the entity or asset would be excluded from an insolvent entity's estate in receivership, insolvency, liquidation, or similar proceeding.

Call Report means Consolidated Reports of Condition and Income.

Carrying value means, with respect to an asset, the value of the asset on the balance sheet of the national bank or Federal savings association, determined in accordance with GAAP.

Central counterparty (CCP) means a counterparty (for example, a clearing house) that facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts.

CFTC means the U.S. Commodity Futures Trading Commission.

Clean-up call means a contractual provision that permits an originating national bank or Federal savings association or servicer to call

securitization exposures before their stated maturity or call date.

Cleared transaction means an exposure associated with an outstanding derivative contract or repo-style transaction that a national bank or Federal savings association or clearing member has entered into with a central counterparty (that is, a transaction that a central counterparty has accepted).

- (1) The following transactions are cleared transactions:
- (i) A transaction between a CCP and a national bank or Federal savings association that is a clearing member of the CCP where the national bank or Federal savings association enters into the transaction with the CCP for the national bank's or Federal savings association's own account;
- (ii) A transaction between a CCP and a national bank or Federal savings association that is a clearing member of the CCP where the national bank or Federal savings association is acting as a financial intermediary on behalf of a clearing member client and the transaction offsets another transaction that satisfies the requirements set forth in §3.3(a);
- (iii) A transaction between a clearing member client national bank or Federal savings association and a clearing member where the clearing member acts as a financial intermediary on behalf of the clearing member client and enters into an offsetting transaction with a CCP, provided that the requirements set forth in §3.3(a) are met; or
- (iv) A transaction between a clearing member client national bank or Federal savings association and a CCP where a clearing member guarantees the performance of the clearing member client national bank or Federal savings association to the CCP and the transaction meets the requirements of §3.3(a)(2) and (3).
- (2) The exposure of a national bank or Federal savings association that is a clearing member to its clearing member client is not a cleared transaction where the national bank or Federal savings association is either acting as a financial intermediary and enters into an offsetting transaction with a CCP or where the national bank or Federal savings association provides a

guarantee to the CCP on the performance of the client. 3

Clearing member means a member of, or direct participant in, a CCP that is entitled to enter into transactions with the CCP.

Clearing member client means a party to a cleared transaction associated with a CCP in which a clearing member acts either as a financial intermediary with respect to the party or guarantees the performance of the party to the CCP.

Collateral agreement means a legal contract that specifies the time when, and circumstances under which, a counterparty is required to pledge collateral to a national bank or Federal savings association for a single financial contract or for all financial contracts in a netting set and confers upon the national bank or Federal savings association a perfected, first-priority security interest (notwithstanding the prior security interest of any custodial agent), or the legal equivalent thereof, in the collateral posted by the counterparty under the agreement. This security interest must provide the national bank or Federal savings association with a right to close out the financial positions and liquidate the collateral upon an event of default of, or failure to perform by, the counterparty under the collateral agreement. A contract would not satisfy this requirement if the national bank's or Federal savings association's exercise of rights under the agreement may be stayed or avoided under applicable law in the relevant jurisdictions, other than in receivership, conservatorship, resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs.

 $^{^3}$ For the standardized approach treatment of these exposures, see §3.34(e) (OTC derivative contracts) or §3.37(c) (repo-style transactions). For the advanced approaches treatment of these exposures, see §§3.132(c)(8) and (d) (OTC derivative contracts) or §§3.132(b) and §3.132(d) (repo-style transactions) and for calculation of the margin period of risk, see §§3.132(d)(5)(iii)(C) (OTC derivative contracts) and §3.132(d)(5)(iii)(A) (repo-style transactions).

Commitment means any legally binding arrangement that obligates a national bank or Federal savings association to extend credit or to purchase assets.

Commodity derivative contract means a commodity-linked swap, purchased commodity-linked option, forward commodity-linked contract, or any other instrument linked to commodities that gives rise to similar counterparty credit risks.

Commodity Exchange Act means the Commodity Exchange Act of 1936 (7 U.S.C. 1 et seq.)

Common equity tier 1 capital is defined in §3.20(b).

Common equity tier 1 minority interest means the common equity tier 1 capital of a depository institution or foreign bank that is:

- (1) A consolidated subsidiary of a national bank or Federal savings association; and
- (2) Not owned by the national bank or Federal savings association.

Company means a corporation, partnership, limited liability company, depository institution, business trust, special purpose entity, association, or similar organization.

Control. A person or company controls a company if it:

- (1) Owns, controls, or holds with power to vote 25 percent or more of a class of voting securities of the company; or
- (2) Consolidates the company for financial reporting purposes.

Core capital means tier 1 capital, as calculated in accordance with subpart B of this part.

Corporate exposure means an exposure to a company that is not:

- (1) An exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, a multi-lateral development bank (MDB), a depository institution, a foreign bank, a credit union, or a public sector entity (PSE);
 - (2) An exposure to a GSE;
 - (3) A residential mortgage exposure;
 - (4) A pre-sold construction loan;
- (5) A statutory multifamily mort-gage:
- (6) A high volatility commercial real estate (HVCRE) exposure;

- (7) A cleared transaction;
- (8) A default fund contribution;
- (9) A securitization exposure;
- (10) An equity exposure; or
- (11) An unsettled transaction.

Country risk classification (CRC) with respect to a sovereign, means the most recent consensus CRC published by the Organization for Economic Cooperation and Development (OECD) as of December 31st of the prior calendar year that provides a view of the likelihood that the sovereign will service its external debt.

Covered savings and loan holding company means a top-tier savings and loan holding company other than:

- (1) A top-tier savings and loan holding company that is:
- (i) A grandfathered unitary savings and loan holding company as defined in section 10(c)(9)(A) of HOLA; and
- (ii) As of June 30 of the previous calendar year, derived 50 percent or more of its total consolidated assets or 50 percent of its total revenues on an enterprise-wide basis (as calculated under GAAP) from activities that are not financial in nature under section 4(k) of the Bank Holding Company Act (12 U.S.C. 1842(k)):
- (2) A top-tier savings and loan holding company that is an insurance underwriting company; or
- (3)(i) A top-tier savings and loan holding company that, as of June 30 of the previous calendar year, held 25 percent or more of its total consolidated assets in subsidiaries that are insurance underwriting companies (other than assets associated with insurance for credit risk); and
- (ii) For purposes of paragraph (3)(i) of this definition, the company must calculate its total consolidated assets in accordance with GAAP, or if the company does not calculate its total consolidated assets under GAAP for any regulatory purpose (including compliance with applicable securities laws), the company may estimate its total consolidated assets, subject to review and adjustment by the Board.

Credit derivative means a financial contract executed under standard industry credit derivative documentation that allows one party (the protection purchaser) to transfer the credit risk of

one or more exposures (reference exposure(s)) to another party (the protection provider) for a certain period of time.

Credit-enhancing interest-only strip (CEIO) means an on-balance sheet asset that, in form or in substance:

- (1) Represents a contractual right to receive some or all of the interest and no more than a minimal amount of principal due on the underlying exposures of a securitization; and
- (2) Exposes the holder of the CEIO to credit risk directly or indirectly associated with the underlying exposures that exceeds a pro rata share of the holder's claim on the underlying exposures, whether through subordination provisions or other credit-enhancement techniques.

Credit-enhancing representations and warranties means representations and warranties that are made or assumed in connection with a transfer of underlying exposures (including loan servicing assets) and that obligate a national bank or Federal savings association to protect another party from losses arising from the credit risk of the underlying exposures. Credit-enhancing representations and warranties include provisions to protect a party from losses resulting from the default or nonperformance of the counterparties of the underlying exposures or from an insufficiency in the value of the collateral backing the underlying exposures. Credit-enhancing representations and warranties do not include:

- (1) Early default clauses and similar warranties that permit the return of, or premium refund clauses covering, 1–4 family residential first mortgage loans that qualify for a 50 percent risk weight for a period not to exceed 120 days from the date of transfer. These warranties may cover only those loans that were originated within 1 year of the date of transfer;
- (2) Premium refund clauses that cover assets guaranteed, in whole or in part, by the U.S. Government, a U.S. Government agency or a GSE, provided the premium refund clauses are for a period not to exceed 120 days from the date of transfer; or
- (3) Warranties that permit the return of underlying exposures in instances of

misrepresentation, fraud, or incomplete documentation.

Credit risk mitigant means collateral, a credit derivative, or a guarantee.

Credit-risk-weighted assets means 1.06 multiplied by the sum of:

- (1) Total wholesale and retail riskweighted assets as calculated under §3.131;
- (2) Risk-weighted assets for securitization exposures as calculated under §3.142; and
- (3) Risk-weighted assets for equity exposures as calculated under §3.151.

Credit union means an insured credit union as defined under the Federal Credit Union Act (12 U.S.C. 1752 et seq.).

Current exposure means, with respect to a netting set, the larger of zero or the fair value of a transaction or portfolio of transactions within the netting set that would be lost upon default of the counterparty, assuming no recovery on the value of the transactions. Current exposure is also called replacement cost.

Current exposure methodology means the method of calculating the exposure amount for over-the-counter derivative contracts in §3.34(a) and exposure at default (EAD) in §3.132(c)(5) or (6), as applicable.

Custodian means a financial institution that has legal custody of collateral provided to a CCP.

Default fund contribution means the funds contributed or commitments made by a clearing member to a CCP's mutualized loss sharing arrangement.

Depository institution means a depository institution as defined in section 3 of the Federal Deposit Insurance Act.

Depository institution holding company means a bank holding company or savings and loan holding company.

Derivative contract means a financial contract whose value is derived from the values of one or more underlying assets, reference rates, or indices of asset values or reference rates. Derivative contracts include interest rate derivative contracts, exchange rate derivative contracts, equity derivative contracts, commodity derivative contracts, credit derivative contracts, and any other instrument that poses similar counterparty credit risks. Derivative contracts also include unsettled securities, commodities, and foreign

exchange transactions with a contractual settlement or delivery lag that is longer than the lesser of the market standard for the particular instrument or five business days.

Discretionary bonus payment means a payment made to an executive officer of a national bank or Federal savings association, where:

- (1) The national bank or Federal savings association retains discretion as to whether to make, and the amount of, the payment until the payment is awarded to the executive officer;
- (2) The amount paid is determined by the national bank or Federal savings association without prior promise to, or agreement with, the executive officer; and
- (3) The executive officer has no contractual right, whether express or implied, to the bonus payment.

Distribution means:

- (1) A reduction of tier 1 capital through the repurchase of a tier 1 capital instrument or by other means, except when a national bank or Federal savings association, within the same quarter when the repurchase is announced, fully replaces a tier 1 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for:
- (i) A common equity tier 1 capital instrument if the instrument being repurchased was part of the national bank's or Federal savings association's common equity tier 1 capital, or
- (ii) A common equity tier 1 or additional tier 1 capital instrument if the instrument being repurchased was part of the national bank's or Federal savings association's tier 1 capital;
- (2) A reduction of tier 2 capital through the repurchase, or redemption prior to maturity, of a tier 2 capital instrument or by other means, except when a national bank or Federal savings association, within the same quarter when the repurchase or redemption is announced, fully replaces a tier 2 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for a tier 1 or tier 2 capital instrument;
- (3) A dividend declaration or payment on any tier 1 capital instrument;
- (4) A dividend declaration or interest payment on any tier 2 capital instru-

ment if the national bank or Federal savings association has full discretion to permanently or temporarily suspend such payments without triggering an event of default; or

(5) Any similar transaction that the OCC determines to be in substance a distribution of capital.

Dodd-Frank Act means the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Pub. L. 111–203, 124 Stat. 1376).

Early amortization provision means a provision in the documentation governing a securitization that, when triggered, causes investors in the securitization exposures to be repaid before the original stated maturity of the securitization exposures, unless the provision:

- (1) Is triggered solely by events not directly related to the performance of the underlying exposures or the originating national bank or Federal savings association (such as material changes in tax laws or regulations); or
- (2) Leaves investors fully exposed to future draws by borrowers on the underlying exposures even after the provision is triggered.

Effective notional amount means for an eligible guarantee or eligible credit derivative, the lesser of the contractual notional amount of the credit risk mitigant and the exposure amount (or EAD for purposes of subpart E of this part) of the hedged exposure, multiplied by the percentage coverage of the credit risk mitigant.

Eligible ABCP liquidity facility means a liquidity facility supporting ABCP, in form or in substance, that is subject to an asset quality test at the time of draw that precludes funding against assets that are 90 days or more past due or in default. Notwithstanding the preceding sentence, a liquidity facility is an eligible ABCP liquidity facility if the assets or exposures funded under the liquidity facility that do not meet the eligibility requirements are guaranteed by a sovereign that qualifies for a 20 percent risk weight or lower.

Eligible clean-up call means a clean-up call that:

(1) Is exercisable solely at the discretion of the originating national bank or Federal savings association or servicer;

- (2) Is not structured to avoid allocating losses to securitization exposures held by investors or otherwise structured to provide credit enhancement to the securitization; and
- (3)(i) For a traditional securitization, is only exercisable when 10 percent or less of the principal amount of the underlying exposures or securitization exposures (determined as of the inception of the securitization) is outstanding; or
- (ii) For a synthetic securitization, is only exercisable when 10 percent or less of the principal amount of the reference portfolio of underlying exposures (determined as of the inception of the securitization) is outstanding.

Eligible credit derivative means a credit derivative in the form of a credit default swap, nth-to-default swap, total return swap, or any other form of credit derivative approved by the OCC, provided that:

- (1) The contract meets the requirements of an eligible guarantee and has been confirmed by the protection purchaser and the protection provider;
- (2) Any assignment of the contract has been confirmed by all relevant parties:
- (3) If the credit derivative is a credit default swap or nth-to-default swap, the contract includes the following credit events:
- (i) Failure to pay any amount due under the terms of the reference exposure, subject to any applicable minimal payment threshold that is consistent with standard market practice and with a grace period that is closely in line with the grace period of the reference exposure; and
- (ii) Receivership, insolvency, liquidation, conservatorship or inability of the reference exposure issuer to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and similar events:
- (4) The terms and conditions dictating the manner in which the contract is to be settled are incorporated into the contract;
- (5) If the contract allows for cash settlement, the contract incorporates a robust valuation process to estimate loss reliably and specifies a reasonable period for obtaining post-credit event valuations of the reference exposure;

- (6) If the contract requires the protection purchaser to transfer an exposure to the protection provider at settlement, the terms of at least one of the exposures that is permitted to be transferred under the contract provide that any required consent to transfer may not be unreasonably withheld;
- (7) If the credit derivative is a credit default swap or nth-to-default swap, the contract clearly identifies the parties responsible for determining whether a credit event has occurred, specifies that this determination is not the sole responsibility of the protection provider, and gives the protection purchaser the right to notify the protection provider of the occurrence of a credit event; and
- (8) If the credit derivative is a total return swap and the national bank or Federal savings association records net payments received on the swap as net income, the national bank or Federal savings association records offsetting deterioration in the value of the hedged exposure (either through reductions in fair value or by an addition to reserves).

Eligible credit reserves means all general allowances that have been established through a charge against earnings to cover estimated credit losses associated with on- or off-balance sheet wholesale and retail exposures, including the ALLL associated with such exposures, but excluding allocated transfer risk reserves established pursuant to 12 U.S.C. 3904 and other specific reserves created against recognized losses.

Eligible guarantee means a guarantee from an eligible guarantor that:

- (1) Is written;
- (2) Is either:
- (i) Unconditional, or
- (ii) A contingent obligation of the U.S. government or its agencies, the enforceability of which is dependent upon some affirmative action on the part of the beneficiary of the guarantee or a third party (for example, meeting servicing requirements);
- (3) Covers all or a pro rata portion of all contractual payments of the obligated party on the reference exposure;
- (4) Gives the beneficiary a direct claim against the protection provider;

- (5) Is not unilaterally cancelable by the protection provider for reasons other than the breach of the contract by the beneficiary;
- (6) Except for a guarantee by a sovereign, is legally enforceable against the protection provider in a jurisdiction where the protection provider has sufficient assets against which a judgment may be attached and enforced;
- (7) Requires the protection provider to make payment to the beneficiary on the occurrence of a default (as defined in the guarantee) of the obligated party on the reference exposure in a timely manner without the beneficiary first having to take legal actions to pursue the obligor for payment;
- (8) Does not increase the beneficiary's cost of credit protection on the guarantee in response to deterioration in the credit quality of the reference exposure; and
- (9) Is not provided by an affiliate of the national bank or Federal savings association, unless the affiliate is an insured depository institution, foreign bank, securities broker or dealer, or insurance company that:
- (i) Does not control the national bank or Federal savings association; and
- (ii) Is subject to consolidated supervision and regulation comparable to that imposed on depository institutions, U.S. securities broker-dealers, or U.S. insurance companies (as the case may be).

Eligible guarantor means:

- (1) A sovereign, the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Commission, a Federal Home Loan Bank, Federal Agricultural Mortgage Corporation (Farmer Mac), a multilateral development bank (MDB), a depository institution, a bank holding company, a savings and loan holding company, a credit union, a foreign bank, or a qualifying central counterparty; or
- (2) An entity (other than a special purpose entity):
- (i) That at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade;

- (ii) Whose creditworthiness is not positively correlated with the credit risk of the exposures for which it has provided guarantees; and
- (iii) That is not an insurance company engaged predominately in the business of providing credit protection (such as a monoline bond insurer or reinsurer).

Eligible margin loan means:

- (1) An extension of credit where:
- (i) The extension of credit is collateralized exclusively by liquid and readily marketable debt or equity securities, or gold;
- (ii) The collateral is marked-to-fair value daily, and the transaction is subject to daily margin maintenance requirements; and
- (iii) The extension of credit is conducted under an agreement that provides the national bank or Federal savings association the right to accelerate and terminate the extension of credit and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, insolvency, liquidation, conservatorship, or similar proceeding, of the counterparty, provided that, in any such case, any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than in receivership, conservatorship, resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs.4
- (2) In order to recognize an exposure as an eligible margin loan for purposes of this subpart, a national bank or Federal savings association must comply with the requirements of §3.3(b) with respect to that exposure.

⁴This requirement is met where all transactions under the agreement are (i) executed under U.S. law and (ii) constitute "securities contracts" under section 555 of the Bankruptcy Code (11 U.S.C. 555), qualified financial contracts under section 11(e)(8) of the Federal Deposit Insurance Act, or netting contracts between or among financial institutions under sections 401–407 of the Federal Deposit Insurance Corporation Improvement Act or the Federal Reserve Board's Regulation EE (12 CFR part 231).

Eligible servicer cash advance facility means a servicer cash advance facility in which:

- (1) The servicer is entitled to full reimbursement of advances, except that a servicer may be obligated to make non-reimbursable advances for a particular underlying exposure if any such advance is contractually limited to an insignificant amount of the outstanding principal balance of that exposure:
- (2) The servicer's right to reimbursement is senior in right of payment to all other claims on the cash flows from the underlying exposures of the securitization; and
- (3) The servicer has no legal obligation to, and does not make advances to the securitization if the servicer concludes the advances are unlikely to be repaid.

Employee stock ownership plan has the same meaning as in 29 CFR 2550.407d-6.

Equity derivative contract means an equity-linked swap, purchased equity-linked option, forward equity-linked contract, or any other instrument linked to equities that gives rise to similar counterparty credit risks.

Equity exposure means:

- (1) A security or instrument (whether voting or non-voting) that represents a direct or an indirect ownership interest in, and is a residual claim on, the assets and income of a company, unless:
- (i) The issuing company is consolidated with the national bank or Federal savings association under GAAP;
- (ii) The national bank or Federal savings association is required to deduct the ownership interest from tier 1 or tier 2 capital under this part:
- (iii) The ownership interest incorporates a payment or other similar obligation on the part of the issuing company (such as an obligation to make periodic payments); or
- (iv) The ownership interest is a securitization exposure;
- (2) A security or instrument that is mandatorily convertible into a security or instrument described in paragraph (1) of this definition;
- (3) An option or warrant that is exercisable for a security or instrument described in paragraph (1) of this definition; or

(4) Any other security or instrument (other than a securitization exposure) to the extent the return on the security or instrument is based on the performance of a security or instrument described in paragraph (1) of this definition.

ERISA means the Employee Retirement Income and Security Act of 1974 (29 U.S.C. 1001 et seq.).

Exchange rate derivative contract means a cross-currency interest rate swap, forward foreign-exchange contract, currency option purchased, or any other instrument linked to exchange rates that gives rise to similar counterparty credit risks.

Executive officer means a person who holds the title or, without regard to title, salary, or compensation, performs the function of one or more of the following positions: President, chief executive officer, executive chairman, chief operating officer, chief financial officer, chief investment officer, chief legal officer, chief lending officer, chief risk officer, or head of a major business line, and other staff that the board of directors of the national bank or Federal savings association deems to have equivalent responsibility.

Expected credit loss (ECL) means:

- (1) For a wholesale exposure to a non-defaulted obligor or segment of non-defaulted retail exposures that is carried at fair value with gains and losses flowing through earnings or that is classified as held-for-sale and is carried at the lower of cost or fair value with losses flowing through earnings, zero.
- (2) For all other wholesale exposures to non-defaulted obligors or segments of non-defaulted retail exposures, the product of the probability of default (PD) times the loss given default (LGD) times the exposure at default (EAD) for the exposure or segment.
- (3) For a wholesale exposure to a defaulted obligor or segment of defaulted retail exposures, the national bank's or Federal savings association's impairment estimate for allowance purposes for the exposure or segment.
- (4) Total ECL is the sum of expected credit losses for all wholesale and retail exposures other than exposures for which the national bank or Federal

savings association has applied the double default treatment in §3.135.

Exposure amount means:

- (1) For the on-balance sheet component of an exposure (other than an available-for-sale or held-to-maturity security, if the national bank or Federal savings association has made an AOCI opt-out election (as defined in $\S 3.22(b)(2)$; an OTC derivative contract; a repo-style transaction or an eligible margin loan for which the national bank or Federal savings association determines the exposure amount under §3.37: a cleared transaction: a default fund contribution; or a securitization exposure), the national bank's or Federal savings association's carrying value of the exposure.
- (2) For a security (that is not a securitization exposure, equity exposure, or preferred stock classified as an equity security under GAAP) classified as available-for-sale or held-to-maturity if the national bank or Federal savings association has made an AOCI opt-out election (as defined in §3.22(b)(2)), the national bank's or Federal savings association's carrying value (including net accrued but unpaid interest and fees) for the exposure less any net unrealized gains on the exposure and plus any net unrealized losses on the exposure.
- (3) For available-for-sale preferred stock classified as an equity security under GAAP if the national bank or Federal savings association has made an AOCI opt-out election (as defined in §3.22(b)(2)), the national bank's or Federal savings association's carrying value of the exposure less any net unrealized gains on the exposure that are reflected in such carrying value but excluded from the national bank's or Federal savings association's regulatory capital components.
- (4) For the off-balance sheet component of an exposure (other than an OTC derivative contract; a repo-style transaction or an eligible margin loan for which the national bank or Federal savings association calculates the exposure amount under §3.37; a cleared transaction; a default fund contribution; or a securitization exposure), the notional amount of the off-balance sheet component multiplied by the ap-

propriate credit conversion factor (CCF) in §3.33.

- (5) For an exposure that is an OTC derivative contract, the exposure amount determined under §3.34.
- (6) For an exposure that is a cleared transaction, the exposure amount determined under §3.35.
- (7) For an exposure that is an eligible margin loan or repo-style transaction for which the bank calculates the exposure amount as provided in §3.37, the exposure amount determined under §3.37.
- (8) For an exposure that is a securitization exposure, the exposure amount determined under \$3.42.

Federal Deposit Insurance Act means the Federal Deposit Insurance Act (12 U.S.C. 1813).

Federal Deposit Insurance Corporation Improvement Act means the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 4401).

Financial collateral means collateral:

- (1) In the form of:
- (i) Cash on deposit with the national bank or Federal savings association (including cash held for the national bank or Federal savings association by a third-party custodian or trustee);
 - (ii) Gold bullion;
- (iii) Long-term debt securities that are not resecuritization exposures and that are investment grade;
- (iv) Short-term debt instruments that are not resecuritization exposures and that are investment grade;
- (v) Equity securities that are publicly traded;
- (vi) Convertible bonds that are publicly traded; or
- (vii) Money market fund shares and other mutual fund shares if a price for the shares is publicly quoted daily; and
- (2) In which the national bank or Federal savings association has a perfected, first-priority security interest or, outside of the United States, the legal equivalent thereof (with the exception of cash on deposit and notwithstanding the prior security interest of any custodial agent).

Federal savings association means an insured Federal savings association or an insured Federal savings bank chartered under section 5 of the Home Owners' Loan Act of 1933.

Financial institution means:

- (1) A bank holding company; savings and loan holding company; nonbank financial institution supervised by the Board under Title I of the Dodd-Frank Act; depository institution; foreign bank; credit union; industrial loan company, industrial bank, or other similar institution described in section 2 of the Bank Holding Company Act; national association, state member bank, or state non-member bank that is not a depository institution; insurance company; securities holding company as defined in section 618 of the Dodd-Frank Act; broker or dealer registered with the SEC under section 15 of the Securities Exchange Act; futures commission merchant as defined in section 1a of the Commodity Exchange Act; swap dealer as defined in section 1a of the Commodity Exchange Act; or security-based swap dealer as defined in section 3 of the Securities Exchange
- (2) Any designated financial market utility, as defined in section 803 of the Dodd-Frank Act;
- (3) Any entity not domiciled in the United States (or a political subdivision thereof) that is supervised and regulated in a manner similar to entities described in paragraphs (1) or (2) of this definition; or
 - (4) Any other company:
- (i) Of which the national bank or Federal savings association owns:
- (A) An investment in GAAP equity instruments of the company with an adjusted carrying value or exposure amount equal to or greater than \$10 million; or
- (B) More than 10 percent of the company's issued and outstanding common shares (or similar equity interest), and
- (ii) Which is predominantly engaged in the following activities:
- (A) Lending money, securities or other financial instruments, including servicing loans;
- (B) Insuring, guaranteeing, indemnifying against loss, harm, damage, illness, disability, or death, or issuing annuities:
- (C) Underwriting, dealing in, making a market in, or investing as principal in securities or other financial instruments; or

- (D) Asset management activities (not including investment or financial advisory activities).
- (5) For the purposes of this definition, a company is "predominantly engaged" in an activity or activities if:
- (i) 85 percent or more of the total consolidated annual gross revenues (as determined in accordance with applicable accounting standards) of the company is either of the two most recent calendar years were derived, directly or indirectly, by the company on a consolidated basis from the activities; or
- (ii) 85 percent or more of the company's consolidated total assets (as determined in accordance with applicable accounting standards) as of the end of either of the two most recent calendar years were related to the activities.
- (6) Any other company that the OCC may determine is a financial institution based on activities similar in scope, nature, or operation to those of the entities included in paragraphs (1) through (4) of this definition.
- (7) For purposes of this part, "financial institution" does not include the following entities:
 - (i) GSEs;
- (ii) Small business investment companies, as defined in section 102 of the Small Business Investment Act of 1958 (15 U.S.C. 662):
- (iii) Entities designated as Community Development Financial Institutions (CDFIs) under 12 U.S.C. 4701 *et seq.* and 12 CFR part 1805;
- (iv) Entities registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1) or foreign equivalents thereof;
- (v) Entities to the extent that the national bank's or Federal savings association's investment in such entities would qualify as a community development investment under section 24 (Eleventh) of the National Bank Act; and
- (vi) An employee benefit plan as defined in paragraphs (3) and (32) of section 3 of ERISA, a "governmental plan" (as defined in 29 U.S.C. 1002(32)) that complies with the tax deferral qualification requirements provided in the Internal Revenue Code, or any similar employee benefit plan established under the laws of a foreign jurisdiction.

First-lien residential mortgage exposure means a residential mortgage exposure secured by a first lien.

Foreign bank means a foreign bank as defined in $\S 211.2$ of the Federal Reserve Board's Regulation K (12 CFR 211.2) (other than a depository institution).

Forward agreement means a legally binding contractual obligation to purchase assets with certain drawdown at a specified future date, not including commitments to make residential mortgage loans or forward foreign exchange contracts.

GAAP means generally accepted accounting principles as used in the United States.

Gain-on-sale means an increase in the equity capital of a national bank or Federal savings association (as reported on [Schedule RC of the Call Report or Schedule HC of the FR Y-9C]) traditional resulting from a. securitization (other than an increase in equity capital resulting from the national bank's or Federal savings association's receipt of cash in connection with the securitization or reporting of a mortgage servicing asset on [Schedule RC of the Call Report or Schedule HC of the FRY-9C]).

General obligation means a bond or similar obligation that is backed by the full faith and credit of a public sector entity (PSE).

Government-sponsored enterprise (GSE) means an entity established or chartered by the U.S. government to serve public purposes specified by the U.S. Congress but whose debt obligations are not explicitly guaranteed by the full faith and credit of the U.S. government.

Guarantee means a financial guarantee, letter of credit, insurance, or other similar financial instrument (other than a credit derivative) that allows one party (beneficiary) to transfer the credit risk of one or more specific exposures (reference exposure) to another party (protection provider).

High volatility commercial real estate (HVCRE) exposure means a credit facility that, prior to conversion to permanent financing, finances or has financed the acquisition, development, or construction (ADC) of real property, unless the facility finances:

- (1) One- to four-family residential properties;
 - (2) Real property that:
- (i) Would qualify as an investment in community development under 12 U.S.C. 338a or 12 U.S.C. 24 (Eleventh), as applicable, or as a "qualified investment" under 12 CFR parts 25 (national banks) and 195 (Federal savings associations), and
- (ii) Is not an ADC loan to any entity described in 12 CFR 25.12(g)(3) (national banks) and 12 CFR 195.12(g)(3) (Federal savings associations), unless it is otherwise described in paragraph (1), (2)(i), (3) or (4) of this definition;
- (3) The purchase or development of agricultural land, which includes all land known to be used or usable for agricultural purposes (such as crop and livestock production), provided that the valuation of the agricultural land is based on its value for agricultural purposes and the valuation does not take into consideration any potential use of the land for non-agricultural commercial development or residential development; or
- (4) Commercial real estate projects in which:
- (i) The loan-to-value ratio is less than or equal to the applicable maximum supervisory loan-to-value ratio in the OCC's real estate lending standards at 12 CFR part 34, subpart D (national banks) and 12 CFR part 160, subparts A and B (Federal savings associations):
- (ii) The borrower has contributed capital to the project in the form of cash or unencumbered readily marketable assets (or has paid development expenses out-of-pocket) of at least 15 percent of the real estate's appraised "as completed" value; and
- (iii) The borrower contributed the amount of capital required by paragraph (4)(ii) of this definition before the national bank or Federal savings association advances funds under the credit facility, and the capital contributed by the borrower, or internally generated by the project, is contractually required to remain in the project throughout the life of the project. The life of a project concludes only when the credit facility is converted to permanent financing or is

sold or paid in full. Permanent financing may be provided by the national bank or Federal savings association that provided the ADC facility as long as the permanent financing is subject to the national bank's or Federal savings association's underwriting criteria for long-term mortgage loans.

Home country means the country where an entity is incorporated, chartered, or similarly established.

Indirect exposure means an exposure that arises from the national bank's or Federal savings association's investment in an investment fund which holds an investment in the national bank's or Federal savings association's own capital instrument or an investment in the capital of an unconsolidated financial institution.

Insurance company means an insurance company as defined in section 201 of the Dodd-Frank Act (12 U.S.C. 5381).

Insurance underwriting company means an insurance company as defined in section 201 of the Dodd-Frank Act (12 U.S.C. 5381) that engages in insurance underwriting activities.

Insured depository institution means an insured depository institution as defined in section 3 of the Federal Deposit Insurance Act.

Interest rate derivative contract means a single-currency interest rate swap, basis swap, forward rate agreement, purchased interest rate option, when-issued securities, or any other instrument linked to interest rates that gives rise to similar counterparty credit risks.

International Lending Supervision Act means the International Lending Supervision Act of 1983 (12 U.S.C. 3907).

Investing bank means, with respect to a securitization, a national bank or Federal savings association that assumes the credit risk of securitization exposure (other than an originating national bank or Federal association of securitization). In the typical synthetic securitization, the investing national bank or Federal savings association sells credit protection on a pool of underlying exposures to the originating national bank or Federal savings association.

Investment fund means a company:

(1) Where all or substantially all of the assets of the company are financial assets; and

(2) That has no material liabilities.

Investment grade means that the entity to which the national bank or Federal savings association is exposed through a loan or security, or the reference entity with respect to a credit derivative, has adequate capacity to meet financial commitments for the projected life of the asset or exposure. Such an entity or reference entity has adequate capacity to meet financial commitments if the risk of its default is low and the full and timely repayment of principal and interest is expected.

Investment in the capital of an unconsolidated financial institution means a net long position calculated in accordance with §3.22(h) in an instrument that is recognized as capital for regulatory purposes by the primary supervisor of an unconsolidated regulated financial institution and is an instrument that is part of the GAAP equity of an unconsolidated unregulated financial institution, including direct, indirect, and synthetic exposures to capital instruments, excluding underwriting positions held by the national bank or Federal savings association for five or fewer business days.

Investment in the national bank's or Federal savings association's own capital instrument means a net long position calculated in accordance with §3.22(h) in the national bank's or Federal savings association's own common stock instrument, own additional tier 1 capital instrument or own tier 2 capital instrument, including direct, indirect, or synthetic exposures to such capital instruments. An investment in the national bank's or Federal savings association's own capital instrument includes any contractual obligation to purchase such capital instrument.

Junior-lien residential mortgage exposure means a residential mortgage exposure that is not a first-lien residential mortgage exposure.

Main index means the Standard & Poor's 500 Index, the FTSE All-World Index, and any other index for which the national bank or Federal savings association can demonstrate to the satisfaction of the OCC that the equities

represented in the index have comparable liquidity, depth of market, and size of bid-ask spreads as equities in the Standard & Poor's 500 Index and FTSE All-World Index.

Market risk [BANK] means a national bank or Federal savings association that is described in §3.201(b).

Money market fund means an investment fund that is subject to 17 CFR 270.2a-7 or any foreign equivalent thereof.

Mortgage servicing assets (MSAs) means the contractual rights owned by a national bank or Federal savings association to service for a fee mortgage loans that are owned by others.

Multilateral development bank (MDB) means the International Bank for Reconstruction and Development, the Multilateral Investment Guarantee Agency, the International Finance Corporation, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the European Investment Fund, the Nordic Investment Bank, the Caribbean Development Bank, the Islamic Development Bank, the Council of Europe Development Bank, and any other multilateral lending institution or regional development bank in which the U.S. government is a shareholder or contributing member or which the OCC determines poses comparable cred-

National Bank Act means the National Bank Act (12 U.S.C. 24).

Netting set means a group of transactions with a single counterparty that are subject to a qualifying master netting agreement or a qualifying cross-product master netting agreement. For purposes of calculating risk-based capital requirements using the internal models methodology in subpart E of this part, this term does not cover a transaction:

- (1) That is not subject to such a master netting agreement; or
- (2) Where the national bank or Federal savings association has identified specific wrong-way risk.

Non-significant investment in the capital of an unconsolidated financial institution means an investment in the capital of an unconsolidated financial in-

stitution where the national bank or Federal savings association owns 10 percent or less of the issued and outstanding common stock of the unconsolidated financial institution.

Nth-to-default credit derivative means a credit derivative that provides credit protection only for the nth-defaulting reference exposure in a group of reference exposures.

Operating entity means a company established to conduct business with clients with the intention of earning a profit in its own right.

Original maturity with respect to an off-balance sheet commitment means the length of time between the date a commitment is issued and:

- (1) For a commitment that is not subject to extension or renewal, the stated expiration date of the commitment: or
- (2) For a commitment that is subject to extension or renewal, the earliest date on which the national bank or Federal savings association can, at its option, unconditionally cancel the commitment.

Originating national bank or Federal savings association, with respect to a securitization, means a national bank or Federal savings association that:

- (1) Directly or indirectly originated or securitized the underlying exposures included in the securitization; or
- (2) Serves as an ABCP program sponsor to the securitization.

Over-the-counter (OTC) derivative contract means a derivative contract that is not a cleared transaction. An OTC derivative includes a transaction:

- (1) Between a national bank or Federal savings association that is a clearing member and a counterparty where the national bank or Federal savings association is acting as a financial intermediary and enters into a cleared transaction with a CCP that offsets the transaction with the counterparty; or
- (2) In which a national bank or Federal savings association that is a clearing member provides a CCP a guarantee on the performance of the counterparty to the transaction.

Performance standby letter of credit (or performance bond) means an irrevocable obligation of a national bank or Federal savings association to pay a thirdparty beneficiary when a customer (account party) fails to perform on any contractual nonfinancial or commercial obligation. To the extent permitted by law or regulation, performance standby letters of credit include arrangements backing, among other things, subcontractors' and suppliers' performance, labor and materials contracts, and construction bids.

Pre-sold construction loan means any one-to-four family residential construction loan to a builder that meets the requirements of section 618(a)(1) or (2) of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 (12 U.S.C. 1831n note) and the following criteria:

- (1) The loan is made in accordance with prudent underwriting standards, meaning that the national bank or Federal savings association has obtained sufficient documentation that the buyer of the home has a legally binding written sales contract and has a firm written commitment for permanent financing of the home upon completion;
- (2) The purchaser is an individual(s) that intends to occupy the residence and is not a partnership, joint venture, trust, corporation, or any other entity (including an entity acting as a sole proprietorship) that is purchasing one or more of the residences for speculative purposes;
- (3) The purchaser has entered into a legally binding written sales contract for the residence:
- (4) The purchaser has not terminated the contract;
- (5) The purchaser has made a substantial earnest money deposit of no less than 3 percent of the sales price, which is subject to forfeiture if the purchaser terminates the sales contract; provided that, the earnest money deposit shall not be subject to forfeiture by reason of breach or termination of the sales contract on the part of the builder;
- (6) The earnest money deposit must be held in escrow by the national bank or Federal savings association or an independent party in a fiduciary capacity, and the escrow agreement must provide that in an event of default arising from the cancellation of the sales contract by the purchaser of the resi-

dence, the escrow funds shall be used to defray any cost incurred by the national bank or Federal savings association:

- (7) The builder must incur at least the first 10 percent of the direct costs of construction of the residence (that is, actual costs of the land, labor, and material) before any drawdown is made under the loan:
- (8) The loan may not exceed 80 percent of the sales price of the presold residence; and
- (9) The loan is not more than 90 days past due, or on nonaccrual.

Protection amount (P) means, with respect to an exposure hedged by an eligible guarantee or eligible credit derivative, the effective notional amount of the guarantee or credit derivative, reduced to reflect any currency mismatch, maturity mismatch, or lack of restructuring coverage (as provided in §§ 3.36 or 3.134, as appropriate).

Publicly-traded means traded on:

- (1) Any exchange registered with the SEC as a national securities exchange under section 6 of the Securities Exchange Act; or
- (2) Any non-U.S.-based securities exchange that:
- (i) Is registered with, or approved by, a national securities regulatory authority; and
- (ii) Provides a liquid, two-way market for the instrument in question.

Public sector entity (PSE) means a state, local authority, or other governmental subdivision below the sovereign level.

- Qualifying central counterparty (QCCP) means a central counterparty that:
- (1)(i) Is a designated financial market utility (FMU) under Title VIII of the Dodd-Frank Act;
- (ii) If not located in the United States, is regulated and supervised in a manner equivalent to a designated FMU; or
 - (iii) Meets the following standards:
- (A) The central counterparty requires all parties to contracts cleared by the counterparty to be fully collateralized on a daily basis;
- (B) The national bank or Federal savings association demonstrates to the satisfaction of the OCC that the central counterparty:

- (1) Is in sound financial condition;
- (2) Is subject to supervision by the Board, the CFTC, or the Securities Exchange Commission (SEC), or, if the central counterparty is not located in the United States, is subject to effective oversight by a national supervisory authority in its home country; and
- (3) Meets or exceeds the risk-management standards for central counterparties set forth in regulations established by the Board, the CFTC, or the SEC under Title VII or Title VIII of the Dodd-Frank Act; or if the central counterparty is not located in the United States, meets or exceeds similar risk-management standards established under the law of its home country that are consistent with international standards for central counterparty risk management as established by the relevant standard setting body of the Bank of International Settlements; and
- (2)(i) Provides the national bank or Federal savings association with the central counterparty's hypothetical capital requirement or the information necessary to calculate such hypothetical capital requirement, and other information the national bank or Federal savings association is required to obtain under §§ 3.35(d)(3) and 3.133(d)(3):
- (ii) Makes available to the OCC and the CCP's regulator the information described in paragraph (2)(i) of this definition; and
- (iii) Has not otherwise been determined by the OCC to not be a QCCP due to its financial condition, risk profile, failure to meet supervisory risk management standards, or other weaknesses or supervisory concerns that are inconsistent with the risk weight assigned to qualifying central counterparties under §§ 3.35 and 3.133.
- (3) Exception. A QCCP that fails to meet the requirements of a QCCP in the future may still be treated as a QCCP under the conditions specified in §3.3(f).

Qualifying master netting agreement means a written, legally enforceable agreement provided that:

(1) The agreement creates a single legal obligation for all individual transactions covered by the agreement upon an event of default, including

upon an event of receivership, insolvency, liquidation, or similar proceeding, of the counterparty:

- (2) The agreement provides the national bank or Federal savings association the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, insolvency, liquidation, or similar proceeding, of the counterparty, provided that, in any such case, any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than in receivership, conservatorship, resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs;
- (3) The agreement does not contain a walkaway clause (that is, a provision that permits a non-defaulting counterparty to make a lower payment than it otherwise would make under the agreement, or no payment at all, to a defaulter or the estate of a defaulter, even if the defaulter or the estate of the defaulter is a net creditor under the agreement); and
- (4) In order to recognize an agreement as a qualifying master netting agreement for purposes of this subpart, a national bank or Federal savings association must comply with the requirements of §3.3(d) with respect to that agreement.

Regulated financial institution means a financial institution subject to consolidated supervision and regulation comparable to that imposed on the following U.S. financial institutions: Depository institutions, depository institution holding companies, nonbank financial companies supervised by the Board, designated financial market utilities, securities broker-dealers, credit unions, or insurance companies.

Repo-style transaction means a repurchase or reverse repurchase transaction, or a securities borrowing or securities lending transaction, including a transaction in which the national bank or Federal savings association acts as agent for a customer and indemnifies the customer against loss, provided that:

- (1) The transaction is based solely on liquid and readily marketable securities, cash, or gold;
- (2) The transaction is marked-to-fair value daily and subject to daily margin maintenance requirements;
- (3)(i) The transaction is a "securities contract" or "repurchase agreement" under section 555 or 559, respectively, of the Bankruptcy Code (11 U.S.C. 555 or 559), a qualified financial contract under section 11(e)(8) of the Federal Deposit Insurance Act, or a netting contract between or among financial institutions under sections 401–407 of the Federal Deposit Insurance Corporation Improvement Act or the Federal Reserve Board's Regulation EE (12 CFR part 231); or
- (ii) If the transaction does not meet the criteria set forth in paragraph (3)(i) of this definition, then either:
- (A) The transaction is executed under an agreement that provides the national bank or Federal savings association the right to accelerate, terminate, and close-out the transaction on a net basis and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, insolvency, liquidation, or similar proceeding, of the counterparty, provided that, in any such case, any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than in receivership, conservatorship, resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs; or
 - (B) The transaction is:
- (1) Either overnight or unconditionally cancelable at any time by the national bank or Federal savings association; and
- (2) Executed under an agreement that provides the national bank or Federal savings association the right to accelerate, terminate, and close-out the transaction on a net basis and to liquidate or set-off collateral promptly upon an event of counterparty default; and
- (4) In order to recognize an exposure as a repo-style transaction for purposes of this subpart, a national bank or Federal savings association must comply

with the requirements of §3.3(e) of this part with respect to that exposure.

Resecuritization means a securitization which has more than one underlying exposure and in which one or more of the underlying exposures is a securitization exposure.

Resecuritization exposure means:

- (1) An on- or off-balance sheet exposure to a resecuritization;
- (2) An exposure that directly or indirectly references a resecuritization exposure.
- (3) An exposure to an asset-backed commercial paper program is not a resecuritization exposure if either:
- (i) The program-wide credit enhancement does not meet the definition of a resecuritization exposure; or
- (ii) The entity sponsoring the program fully supports the commercial paper through the provision of liquidity so that the commercial paper holders effectively are exposed to the default risk of the sponsor instead of the underlying exposures.

Residential mortgage exposure means an exposure (other than a securitization exposure, equity exposure, statutory multifamily mortgage, or presold construction loan) that is:

- (1) An exposure that is primarily secured by a first or subsequent lien on one-to-four family residential property; or
- (2)(i) An exposure with an original and outstanding amount of \$1 million or less that is primarily secured by a first or subsequent lien on residential property that is not one-to-four family; and
- (ii) For purposes of calculating capital requirements under subpart E of this part, is managed as part of a segment of exposures with homogeneous risk characteristics and not on an individual-exposure basis.

Revenue obligation means a bond or similar obligation that is an obligation of a PSE, but which the PSE is committed to repay with revenues from the specific project financed rather than general tax funds.

Savings and loan holding company means a savings and loan holding company as defined in section 10 of the Home Owners' Loan Act (12 U.S.C. 1467a).

Securities and Exchange Commission (SEC) means the U.S. Securities and Exchange Commission.

Securities Exchange Act means the Securities Exchange Act of 1934 (15 U.S.C. 78)

Securitization exposure means:

- (1) An on-balance sheet or off-balance sheet credit exposure (including creditenhancing representations and warranties) that arises from a traditional securitization or synthetic securitization (including a resecuritization), or
- (2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition

Securitization special purpose entity (securitization SPE) means a corporation, trust, or other entity organized for the specific purpose of holding underlying exposures of a securitization, the activities of which are limited to those appropriate to accomplish this purpose, and the structure of which is intended to isolate the underlying exposures held by the entity from the credit risk of the seller of the underlying exposures to the entity.

Separate account means a legally segregated pool of assets owned and held by an insurance company and maintained separately from the insurance company's general account assets for the benefit of an individual contract holder. To be a separate account:

- (1) The account must be legally recognized as a separate account under applicable law;
- (2) The assets in the account must be insulated from general liabilities of the insurance company under applicable law in the event of the insurance company's insolvency;
- (3) The insurance company must invest the funds within the account as directed by the contract holder in designated investment alternatives or in accordance with specific investment objectives or policies; and
- (4) All investment gains and losses, net of contract fees and assessments, must be passed through to the contract holder, provided that the contract may specify conditions under which there may be a minimum guarantee but must not include contract terms that limit

the maximum investment return available to the policyholder.

Servicer cash advance facility means a facility under which the servicer of the underlying exposures of a securitization may advance cash to ensure an uninterrupted flow of payments to investors in the securitization, including advances made to cover foreclosure costs or other expenses to facilitate the timely collection of the underlying exposures.

Significant investment in the capital of an unconsolidated financial institution means an investment in the capital of an unconsolidated financial institution where the national bank or Federal savings association owns more than 10 percent of the issued and outstanding common stock of the unconsolidated financial institution.

Small Business Act means the Small Business Act (15 U.S.C. 632).

Small Business Investment Act means the Small Business Investment Act of 1958 (15 U.S.C. 682).

Sovereign means a central government (including the U.S. government) or an agency, department, ministry, or central bank of a central government.

Sovereign default means noncompliance by a sovereign with its external debt service obligations or the inability or unwillingness of a sovereign government to service an existing loan according to its original terms, as evidenced by failure to pay principal and interest timely and fully, arrearages, or restructuring.

Sovereign exposure means:

- (1) A direct exposure to a sovereign; or
- (2) An exposure directly and unconditionally backed by the full faith and credit of a sovereign.

Specific wrong-way risk means wrongway risk that arises when either:

- (1) The counterparty and issuer of the collateral supporting the transaction; or
- (2) The counterparty and the reference asset of the transaction, are affiliates or are the same entity.

Standardized market risk-weighted assets means the standardized measure for market risk calculated under §3.204 multiplied by 12.5.

Standardized total risk-weighted assets means:

- (1) The sum of:
- (i) Total risk-weighted assets for general credit risk as calculated under §3.31;
- (ii) Total risk-weighted assets for cleared transactions and default fund contributions as calculated under §3.35;
- (iii) Total risk-weighted assets for unsettled transactions as calculated under §3.38;
- (iv) Total risk-weighted assets for securitization exposures as calculated under § 3.42:
- (v) Total risk-weighted assets for equity exposures as calculated under §§ 3.52 and 3.53; and
- (vi) For a market risk national bank or Federal savings association only, standardized market risk-weighted assets: minus
- (2) Any amount of the national bank's or Federal savings association's allowance for loan and lease losses that is not included in tier 2 capital and any amount of allocated transfer risk reserves.

Statutory multifamily mortgage means a loan secured by a multifamily residential property that meets the requirements under section 618(b)(1) of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991, and that meets the following criteria: ⁵

- (1) The loan is made in accordance with prudent underwriting standards;
- (2) The principal amount of the loan at origination does not exceed 80 percent of the value of the property (or 75 percent of the value of the property if the loan is based on an interest rate that changes over the term of the loan) where the value of the property is the lower of the acquisition cost of the property or the appraised (or, if appropriate, evaluated) value of the property;
- (3) All principal and interest payments on the loan must have been made on a timely basis in accordance with the terms of the loan for at least one year prior to applying a 50 percent risk weight to the loan, or in the case where an existing owner is refinancing a loan on the property, all principal

- and interest payments on the loan being refinanced must have been made on a timely basis in accordance with the terms of the loan for at least one year prior to applying a 50 percent risk weight to the loan;
- (4) Amortization of principal and interest on the loan must occur over a period of not more than 30 years and the minimum original maturity for repayment of principal must not be less than 7 years;
- (5) Annual net operating income (before making any payment on the loan) generated by the property securing the loan during its most recent fiscal year must not be less than 120 percent of the loan's current annual debt service (or 115 percent of current annual debt service if the loan is based on an interest rate that changes over the term of the loan) or, in the case of a cooperative or other not-for-profit housing project, the property must generate sufficient cash flow to provide comparable protection to the national bank or Federal savings association; and
- (6) The loan is not more than 90 days past due, or on nonaccrual.

Subsidiary means, with respect to a company, a company controlled by that company.

Synthetic exposure means an exposure whose value is linked to the value of an investment in the national bank's or Federal savings association's own capital instrument or to the value of an investment in the capital of an unconsolidated financial institution.

Synthetic securitization means a transaction in which:

- (1) All or a portion of the credit risk of one or more underlying exposures is retained or transferred to one or more third parties through the use of one or more credit derivatives or guarantees (other than a guarantee that transfers only the credit risk of an individual retail exposure);
- (2) The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority;
- (3) Performance of the securitization exposures depends upon the performance of the underlying exposures; and
- (4) All or substantially all of the underlying exposures are financial exposures (such as loans, commitments,

 $^{^5{}m The}$ types of loans that qualify as loans secured by multifamily residential properties are listed in the instructions for preparation of the Call Report.

credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities).

Tangible capital means the amount of core capital (tier 1 capital), as calculated in accordance with subpart B of this part, plus the amount of outstanding perpetual preferred stock (including related surplus) not included in tier 1 capital.

Tier 1 capital means the sum of common equity tier 1 capital and additional tier 1 capital.

Tier 1 minority interest means the tier 1 capital of a consolidated subsidiary of a national bank or Federal savings association that is not owned by the national bank or Federal savings association.

Tier 2 capital is defined in §3.20(d).

Total capital means the sum of tier 1 capital and tier 2 capital.

Total capital minority interest means the total capital of a consolidated subsidiary of a national bank or Federal savings association that is not owned by the national bank or Federal savings association.

Total leverage exposure means the sum of the following:

- (1) The balance sheet carrying value of all of the national bank's or Federal savings association's on-balance sheet assets, *less* amounts deducted from tier 1 capital under §3.22(a), (c), and (d);
- (2) The potential future credit exposure (PFE) amount for each derivative contract to which the national bank or Federal savings association is a counterparty (or each single-product netting set of such transactions) determined in accordance with §3.34, but without regard to §3.34(b):
- (3) 10 percent of the notional amount of unconditionally cancellable commitments made by the national bank or Federal savings association; and
- (4) The notional amount of all other off-balance sheet exposures of the national bank or Federal savings association (excluding securities lending, securities borrowing, reverse repurchase transactions, derivatives and unconditionally cancellable commitments).

Traditional securitization means a transaction in which:

(1) All or a portion of the credit risk of one or more underlying exposures is

transferred to one or more third parties other than through the use of credit derivatives or guarantees;

- (2) The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority;
- (3) Performance of the securitization exposures depends upon the performance of the underlying exposures;
- (4) All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities);
- (5) The underlying exposures are not owned by an operating company;
- (6) The underlying exposures are not owned by a small business investment company defined in section 302 of the Small Business Investment Act;
- (7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under section 24(Eleventh) of the National Bank Act;
- (8) The OCC may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet exposures is not a traditional securitization based on the transaction's leverage, risk profile, or economic substance:
- (9) The OCC may deem a transaction that meets the definition of a traditional securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a traditional securitization based on the transaction's leverage, risk profile, or economic substance; and
 - (10) The transaction is not:
 - (i) An investment fund;
- (ii) A collective investment fund (as defined in 12 CFR 9.18 (national banks), 12 CFR 151.40 (Federal saving associations):
- (iii) An employee benefit plan (as defined in paragraphs (3) and (32) of section 3 of ERISA), a "governmental plan" (as defined in 29 U.S.C. 1002(32)) that complies with the tax deferral qualification requirements provided in the Internal Revenue Code, or any

similar employee benefit plan established under the laws of a foreign jurisdiction;

- (iv) A synthetic exposure to the capital of a financial institution to the extent deducted from capital under §3.22; or
- (v) Registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1) or foreign equivalents thereof.

Tranche means all securitization exposures associated with a securitization that have the same seniority level.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short time frame conforming to trade custom.

Unconditionally cancelable means with respect to a commitment, that a national bank or Federal savings association may, at any time, with or without cause, refuse to extend credit under the commitment (to the extent permitted under applicable law).

Underlying exposures means one or more exposures that have been securitized in a securitization transaction.

Unregulated financial institution means, for purposes of §3.131, a financial institution that is not a regulated financial institution, including any financial institution that would meet the definition of "financial institution" under this section but for the ownership interest thresholds set forth in paragraph (4)(i) of that definition.

U.S. Government agency means an instrumentality of the U.S. Government whose obligations are fully and explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. Government.

Value-at-Risk (VaR) means the estimate of the maximum amount that the value of one or more exposures could decline due to market price or rate movements during a fixed holding period within a stated confidence interval

Wrong-way risk means the risk that arises when an exposure to a particular counterparty is positively correlated with the probability of default of such counterparty itself.

§ 3.3 Operational requirements for counterparty credit risk.

For purposes of calculating risk-weighted assets under subparts D and E of this part:

- (a) Cleared transaction. In order to recognize certain exposures as cleared transactions pursuant to paragraphs (1)(ii), (iii) or (iv) of the definition of "cleared transaction" in §3.2, the exposures must meet the applicable requirements set forth in this paragraph (a).
- (1) The offsetting transaction must be identified by the CCP as a transaction for the clearing member client.
- (2) The collateral supporting the transaction must be held in a manner that prevents the national bank or Federal savings association from facing any loss due to an event of default, including from a liquidation, receivership, insolvency, or similar proceeding of either the clearing member or the clearing member's other clients. Omnibus accounts established under 17 CFR parts 190 and 300 satisfy the requirements of this paragraph (a).
- (3) The national bank or Federal savings association must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from a default or receivership, insolvency, liquidation, or similar proceeding) the relevant court and administrative authorities would find the arrangements of paragraph (a)(2) of this section to be legal, valid, binding and enforceable under the law of the relevant jurisdictions.
- (4) The offsetting transaction with a clearing member must be transferable under the transaction documents and applicable laws in the relevant jurisdiction(s) to another clearing member should the clearing member default, become insolvent, or enter receivership, insolvency, liquidation, or similar proceedings.

§§ 3.4-3.9

- (b) Eligible margin loan. In order to recognize an exposure as an eligible margin loan as defined in §3.2, a national bank or Federal savings association must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that the agreement underlying the exposure:
- (1) Meets the requirements of paragraph (1)(iii) of the definition of eligible margin loan in §3.2, and
- (2) Is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.
- (c) Qualifying cross-product master netting agreement. In order to recognize an agreement as a qualifying cross-product master netting agreement as defined in §3.101, a national bank or Federal savings association must obtain a written legal opinion verifying the validity and enforceability of the agreement under applicable law of the relevant jurisdictions if the counterparty fails to perform upon an event of default, including upon receivership, insolvency, liquidation, or similar proceeding.
- (d) Qualifying master netting agreement. In order to recognize an agreement as a qualifying master netting agreement as defined in §3.2, a national bank or Federal savings association must:
- (1) Conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that:
- (i) The agreement meets the requirements of paragraph (2) of the definition of qualifying master netting agreement in §3.2: and
- (ii) In the event of a legal challenge (including one resulting from default or from receivership, insolvency, liquidation, or similar proceeding) the relevant court and administrative authorities would find the agreement to be legal, valid, binding, and enforceable under the law of the relevant jurisdictions; and
- (2) Establish and maintain written procedures to monitor possible changes in relevant law and to ensure that the agreement continues to satisfy the requirements of the definition of qualifying master netting agreement in §3.2.

- (e) Repo-style transaction. In order to recognize an exposure as a repo-style transaction as defined in §3.2, a national bank or Federal savings association must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that the agreement underlying the exposure:
- (1) Meets the requirements of paragraph (3) of the definition of repo-style transaction in §3.2, and
- (2) Is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.
- (f) Failure of a QCCP to satisfy the rule's requirements. If a national bank or Federal savings association determines that a CCP ceases to be a QCCP due to the failure of the CCP to satisfy one or more of the requirements set forth in paragraphs (2)(i) through (2)(iii) of the definition of a QCCP in §3.2, the national bank or Federal savings association may continue to treat the CCP as a QCCP for up to three months following the determination. If the CCP fails to remedy the relevant deficiency within three months after the initial determination, or the CCP fails to satisfy the requirements set forth in paragraphs (2)(i) through (2)(iii) of the definition of a QCCP continuously for a three-month period after remedying the relevant deficiency, a national bank or Federal savings association may not treat the CCP as a QCCP for the purposes of this part until after the national bank or Federal savings association has determined that the CCP has satisfied the requirements in paragraphs (2)(i) through (2)(iii) of the definition of a QCCP for three continuous months.

§§ 3.4-3.9 [Reserved]

Subpart B—Capital Ratio Requirements and Buffers

SOURCE: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§ 3.10 Minimum capital requirements.

(a) Minimum capital requirements. A national bank or Federal savings association must maintain the following minimum capital ratios:

- (1) A common equity tier 1 capital ratio of 4.5 percent.
 - (2) A tier 1 capital ratio of 6 percent.
 - (3) A total capital ratio of 8 percent.
 - (4) A leverage ratio of 4 percent.
- (5) For advanced approaches national banks or Federal savings associations, a supplementary leverage ratio of 3 percent.
- (6) For Federal savings associations, a tangible capital ratio of 1.5 percent.
- (b) Standardized capital ratio calculations. Other than as provided in paragraph (c) of this section:
- (1) Common equity tier 1 capital ratio. A national bank's or Federal savings association's common equity tier 1 capital ratio is the ratio of the national bank's or Federal savings association's common equity tier 1 capital to standardized total risk-weighted assets;
- (2) Tier 1 capital ratio. A national bank's or Federal savings association's tier 1 capital ratio is the ratio of the national bank's or Federal savings association's tier 1 capital to standardized total risk-weighted assets;
- (3) Total capital ratio. A national bank's or Federal savings association's total capital ratio is the ratio of the national bank's or Federal savings association's total capital to standardized total risk-weighted assets; and
- (4) Leverage ratio. A national bank's or Federal savings association's leverage ratio is the ratio of the national bank's or Federal savings association's tier 1 capital to the national bank's or Federal savings association's average total consolidated assets as reported on the national bank's or Federal savings association's Call Report minus amounts deducted from tier 1 capital under §3.22(a), (c) and (d).
- (5) Federal savings association tangible capital ratio. A Federal savings association's tangible capital ratio is the ratio of the Federal savings association's core capital (tier 1 capital) to average total assets as calculated under this subpart B. For purposes of this paragraph (b)(5), the term "total assets" means "total assets" as defined in part 6, subpart A of this chapter, subject to subpart G of this part.
- (c) Advanced approaches capital ratio calculations. An advanced approaches national bank or Federal savings association that has completed the parallel

- run process and received notification from the OCC pursuant to §3.121(d) must determine its regulatory capital ratios as described in this paragraph (c).
- (1) Common equity tier 1 capital ratio. The national bank's or Federal savings association's common equity tier 1 capital ratio is the lower of:
- (i) The ratio of the national bank's or Federal savings association's common equity tier 1 capital to standardized total risk-weighted assets; and
- (ii) The ratio of the national bank's or Federal savings association's common equity tier 1 capital to advanced approaches total risk-weighted assets.
- (2) *Tier 1 capital ratio*. The national bank's or Federal savings association's tier 1 capital ratio is the lower of:
- (i) The ratio of the national bank's or Federal savings association's tier 1 capital to standardized total riskweighted assets; and
- (ii) The ratio of the national bank's or Federal savings association's tier 1 capital to advanced approaches total risk-weighted assets.
- (3) Total capital ratio. The national bank's or Federal savings association's total capital ratio is the lower of:
- (i) The ratio of the national bank's or Federal savings association's total capital to standardized total risk-weighted assets; and
- (ii) The ratio of the national bank's or Federal savings association's advanced-approaches-adjusted total capital to advanced approaches total risk-weighted assets. A national bank's or Federal savings association's advanced-approaches-adjusted total capital is the national bank's or Federal savings association's total capital after being adjusted as follows:
- (A) An advanced approaches national bank or Federal savings association must deduct from its total capital any allowance for loan and lease losses included in its tier 2 capital in accordance with §3.20(d)(3); and
- (B) An advanced approaches national bank or Federal savings association must add to its total capital any eligible credit reserves that exceed the national bank's or Federal savings association's total expected credit losses to the extent that the excess reserve amount does not exceed 0.6 percent of

§3.11

the national bank's or Federal savings association's credit risk-weighted assets

- (4) Supplementary leverage ratio. An advanced approaches national bank's or Federal savings association's supplementary leverage ratio is the simple arithmetic mean of the ratio of its tier 1 capital to total leverage exposure calculated as of the last day of each month in the reporting quarter.
- (5) Federal savings association tangible capital ratio. A Federal savings association's tangible capital ratio is the ratio of the Federal savings association's core capital (tier 1 capital) to average total assets as calculated under this subpart B. For purposes of this paragraph (c)(5), the term "total assets" means "total assets" as defined in part 6, subpart A of this chapter, subject to subpart G of this part.
- (d) Capital adequacy. (1) Notwithstanding the minimum requirements in this part, a national bank or Federal savings association must maintain capital commensurate with the level and nature of all risks to which the national bank or Federal savings association is exposed. The supervisory evaluation of a national bank's or Federal savings association's capital adequacy is based on an individual assessment of numerous factors, including those listed at this section (national banks), 12 CFR 167.3(c) (Federal savings associations).
- (2) A national bank or Federal savings association must have a process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.

§ 3.11 Capital conservation buffer and countercyclical capital buffer amount.

- (a) Capital conservation buffer. (1) Composition of the capital conservation buffer. The capital conservation buffer is composed solely of common equity tier 1 capital.
- (2) Definitions. For purposes of this section, the following definitions apply:
- (i) Eligible retained income. The eligible retained income of a national bank or Federal savings association is the national bank's or Federal savings as-

- sociation's net income for the four calendar quarters preceding the current calendar quarter, based on the national bank's or Federal savings association's quarterly Call Reports, net of any distributions and associated tax effects not already reflected in net income.
- (ii) Maximum payout ratio. The maximum payout ratio is the percentage of eligible retained income that a national bank or Federal savings association can pay out in the form of distributions and discretionary bonus payments during the current calendar quarter. The maximum payout ratio is based on the national bank's or Federal savings association's capital conservation buffer, calculated as of the last day of the previous calendar quarter, as set forth in Table 1 to §3.11.
- (iii) Maximum payout amount. A national bank's or Federal savings association's maximum payout amount for the current calendar quarter is equal to the national bank's or Federal savings association's eligible retained income, multiplied by the applicable maximum payout ratio, as set forth in Table 1 to §3.11.
- (iv) Private sector credit exposure. Private sector credit exposure means an exposure to a company or an individual that is not an exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, a MDB, a PSE, or a GSE.
- (3) Calculation of capital conservation buffer. (i) A national bank's or Federal savings association's capital conservation buffer is equal to the lowest of the following ratios, calculated as of the last day of the previous calendar quarter based on the national bank's or Federal savings association's most recent Call Report:
- (A) The national bank's or Federal savings association's common equity tier 1 capital ratio minus the national bank's or Federal savings association's minimum common equity tier 1 capital ratio requirement under §3.10;
- (B) The national bank's or Federal savings association's tier 1 capital ratio minus the national bank's or Federal savings association's minimum tier 1 capital ratio requirement under §3.10; and

- (C) The national bank's or Federal savings association's total capital ratio minus the national bank's or Federal savings association's minimum total capital ratio requirement under §3.10; or
- (ii) Notwithstanding paragraphs (a)(3)(i)(A)–(C) of this section, if the national bank's or Federal savings association's common equity tier 1, tier 1 or total capital ratio is less than or equal to the national bank's or Federal savings association's minimum common equity tier 1, tier 1 or total capital ratio requirement under §3.10, respectively, the national bank's or Federal savings association's capital conservation buffer is zero.
- (4) Limits on distributions and discretionary bonus payments. (i) A national bank or Federal savings association shall not make distributions or discretionary bonus payments or create an obligation to make such distributions or payments during the current calendar quarter that, in the aggregate, exceed the maximum payout amount.
- (ii) A national bank or Federal savings association with a capital conservation buffer that is greater than 2.5 percent plus 100 percent of its applicable countercyclical capital buffer, in accordance with paragraph (b) of this

- section, is not subject to a maximum payout amount under this section.
- (iii) Negative eligible retained income. Except as provided in paragraph (a)(4)(iv) of this section, a national bank or Federal savings association may not make distributions or discretionary bonus payments during the current calendar quarter if the national bank's or Federal savings association's:
- (A) Eligible retained income is negative; and
- (B) Capital conservation buffer was less than 2.5 percent as of the end of the previous calendar quarter.
- (iv) Prior approval. Notwithstanding the limitations in paragraphs (a)(4)(i)through (iii) of this section, the OCC may permit a national bank or Federal savings association to make a distribution or discretionary bonus payment upon a request of the national bank or Federal savings association, if the OCC determines that the distribution or discretionary bonus payment would not be contrary to the purposes of this section, or to the safety and soundness of the national bank or Federal savings association. In making such a determination, the OCC will consider the nature and extent of the request and the particular circumstances giving rise to the request.

TABLE 1 TO § 3.11—CALCULATION OF MAXIMUM PAYOUT AMOUNT

Capital conservation buffer	Maximum payout ratio (as a percentage of eligible retained income)
Greater than 2.5 percent plus 100 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount.	No payout ratio limitation applies.
Less than or equal to 2.5 percent plus 100 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount, and greater than 1.875 percent plus 75 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount.	60 percent.
Less than or equal to 1.875 percent plus 75 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount, and greater than 1.25 percent plus 50 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount.	40 percent.
Less than or equal to 1.25 percent plus 50 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount, and greater than 0.625 percent plus 25 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount.	20 percent.
Less than or equal to 0.625 percent plus 25 percent of the national bank's or Federal savings association's applicable countercyclical capital buffer amount.	0 percent.

(v) Other limitations on distributions. Additional limitations on distributions may apply to a national bank or Federal savings association under subparts

H and I of this part; 12 CFR 5.46, 12 CFR part 5, subpart E; 12 CFR part 6.

§3.11

- (b) Countercyclical capital buffer amount. (1) General. An advanced approaches national bank or Federal savings association must calculate a countercyclical capital buffer amount in accordance with the following paragraphs for purposes of determining its maximum payout ratio under Table 1 to \$3.11.
- (i) Extension of capital conservation buffer. The countercyclical capital buffer amount is an extension of the capital conservation buffer as described in paragraph (a) of this section.
- (ii) Amount. An advanced approaches national bank or Federal savings association has a countercyclical capital buffer amount determined by calculating the weighted average of the countercyclical capital buffer amounts established for the national jurisdictions where the national bank's or Federal savings association's private sector credit exposures are located, as specified in paragraphs (b)(2) and (3) of this section.
- (iii) Weighting. The weight assigned to a jurisdiction's countercyclical capital buffer amount is calculated by dividing the total risk-weighted assets for the national bank's or Federal savings association's private sector credit exposures located in the jurisdiction by the total risk-weighted assets for all of the national bank's or Federal savings association's private sector credit exposures. The methodology a national bank or Federal savings association uses for determining risk-weighted assets for purposes of this paragraph (b) must be the methodology that determines its risk-based capital ratios under §3.10. Notwithstanding the previous sentence, the risk-weighted asset amount for a private sector credit exposure that is a covered position under subpart F of this part is its specific risk add-on as determined under §3.210 multiplied by 12.5.
- (iv) Location. (A) Except as provided in paragraphs (b)(1)(iv)(B) and (b)(1)(iv)(C) of this section, the location of a private sector credit exposure is the national jurisdiction where the borrower is located (that is, where it is incorporated, chartered, or similarly established or, if the borrower is an individual, where the borrower resides).

- (B) If, in accordance with subparts D or E of this part, the national bank or Federal savings association has assigned to a private sector credit exposure a risk weight associated with a protection provider on a guarantee or credit derivative, the location of the exposure is the national jurisdiction where the protection provider is located.
- (C) The location of a securitization exposure is the location of the underlying exposures, or, if the underlying exposures are located in more than one national jurisdiction, the national jurisdiction where the underlying exposures with the largest aggregate unpaid principal balance are located. For purposes of this paragraph (b), the location of an underlying exposure shall be the location of the borrower, determined consistent with paragraph (b)(1)(iv)(A) of this section.
- (2) Countercyclical capital buffer amount for credit exposures in the United States—(i) Initial countercyclical capital buffer amount with respect to credit exposures in the United States. The initial countercyclical capital buffer amount in the United States is zero.
- (ii) Adjustment of the countercyclical capital buffer amount. The OCC will adjust the countercyclical capital buffer amount for credit exposures in the United States in accordance with applicable law.⁶
- (iii) Range of countercyclical capital buffer amount. The OCC will adjust the countercyclical capital buffer amount for credit exposures in the United States between zero percent and 2.5 percent of risk-weighted assets.
- (iv) Adjustment determination. The OCC will base its decision to adjust the countercyclical capital buffer amount under this section on a range of macroeconomic, financial, and supervisory information indicating an increase in systemic risk including, but not limited to, the ratio of credit to gross domestic product, a variety of asset prices, other factors indicative of relative credit and liquidity expansion or contraction, funding spreads, credit condition surveys, indices based on

⁶The OCC expects that any adjustment will be based on a determination made jointly by the Board. OCC. and FDIC.

credit default swap spreads, options implied volatility, and measures of systemic risk.

- (v) Effective date of adjusted countercyclical capital buffer amount. (A) Increase adjustment. A determination by the OCC under paragraph (b)(2)(ii) of this section to increase the countercyclical capital buffer amount will be effective 12 months from the date of announcement, unless the OCC establishes an earlier effective date and includes a statement articulating the reasons for the earlier effective date.
- (B) Decrease adjustment. A determination by the OCC to decrease the established countercyclical capital buffer amount under paragraph (b)(2)(ii) of this section will be effective on the day following announcement of the final determination or the earliest date permissible under applicable law or regulation, whichever is later.
- (vi) Twelve month sunset. The counter-cyclical capital buffer amount will return to zero percent 12 months after the effective date that the adjusted countercyclical capital buffer amount is announced, unless the OCC announces a decision to maintain the adjusted countercyclical capital buffer amount or adjust it again before the expiration of the 12-month period.
- (3) Countercyclical capital buffer amount for foreign jurisdictions. The OCC will adjust the countercyclical capital buffer amount for private sector credit exposures to reflect decisions made by foreign jurisdictions consistent with due process requirements described in paragraph (b)(2) of this section.

[78 FR 62157, 62273, 62274, Oct. 11, 2013]

§§ 3.12-3.19 [Reserved]

Subpart C—Definition of Capital

Source: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§ 3.20 Capital components and eligibility criteria for regulatory capital instruments.

- (a) Regulatory capital components. A national bank's or Federal savings association's regulatory capital components are:
 - (1) Common equity tier 1 capital;
 - (2) Additional tier 1 capital; and

- (3) Tier 2 capital.
- (b) Common equity tier 1 capital. Common equity tier 1 capital is the sum of the common equity tier 1 capital elements in this paragraph (b), minus regulatory adjustments and deductions in §3.22. The common equity tier 1 capital elements are:
- (1) Any common stock instruments (plus any related surplus) issued by the national bank or Federal savings association, net of treasury stock, and any capital instruments issued by mutual banking organizations, that meet all the following criteria:
- (i) The instrument is paid-in, issued directly by the national bank or Federal savings association, and represents the most subordinated claim in a receivership, insolvency, liquidation, or similar proceeding of the national bank or Federal savings association:
- (ii) The holder of the instrument is entitled to a claim on the residual assets of the national bank or Federal savings association that is proportional with the holder's share of the national bank's or Federal savings association's issued capital after all senior claims have been satisfied in a receivership, insolvency, liquidation, or similar proceeding;
- (iii) The instrument has no maturity date, can only be redeemed via discretionary repurchases with the prior approval of the OCC, and does not contain any term or feature that creates an incentive to redeem:
- (iv) The national bank or Federal savings association did not create at issuance of the instrument through any action or communication an expectation that it will buy back, cancel, or redeem the instrument, and the instrument does not include any term or feature that might give rise to such an expectation;
- (v) Any cash dividend payments on the instrument are paid out of the national bank's or Federal savings association's net income or retained earnings and are not subject to a limit imposed by the contractual terms governing the instrument.
- (vi) The national bank or Federal savings association has full discretion at all times to refrain from paying any dividends and making any other distributions on the instrument without

triggering an event of default, a requirement to make a payment-in-kind, or an imposition of any other restrictions on the national bank or Federal savings association:

(vii) Dividend payments and any other distributions on the instrument may be paid only after all legal and contractual obligations of the national bank or Federal savings association have been satisfied, including payments due on more senior claims:

(viii) The holders of the instrument bear losses as they occur equally, proportionately, and simultaneously with the holders of all other common stock instruments before any losses are borne by holders of claims on the national bank or Federal savings association with greater priority in a receivership, insolvency, liquidation, or similar proceeding;

(ix) The paid-in amount is classified as equity under GAAP:

(x) The national bank or Federal savings association, or an entity that the national bank or Federal savings association controls, did not purchase or directly or indirectly fund the purchase of the instrument;

(xi) The instrument is not secured, not covered by a guarantee of the national bank or Federal savings association or of an affiliate of the national bank or Federal savings association, and is not subject to any other arrangement that legally or economically enhances the seniority of the instrument:

(xii) The instrument has been issued in accordance with applicable laws and regulations; and

(xiii) The instrument is reported on the national bank's or Federal savings association's regulatory financial statements separately from other capital instruments.

(2) Retained earnings.

(3) Accumulated other comprehensive income (AOCI) as reported under ${\rm GAAP.}^7$

(4) Any common equity tier 1 minority interest, subject to the limitations in §3.21(c).

(5) Notwithstanding the criteria for common stock instruments referenced

above, a national bank's or Federal savings association's common stock issued and held in trust for the benefit of its employees as part of an employee stock ownership plan does not violate any of the criteria in paragraph (b)(1)(iii), paragraph (b)(1)(iv) or paragraph (b)(1)(xi) of this section, provided that any repurchase of the stock is required solely by virtue of ERISA for an instrument of a national bank or Federal savings association that is not publicly-traded. In addition, an instrument issued by a national bank or Federal savings association to its employee stock ownership plan does not violate the criterion in paragraph (b)(1)(x) of this section.

(c) Additional tier 1 capital. Additional tier 1 capital is the sum of additional tier 1 capital elements and any related surplus, minus the regulatory adjustments and deductions in §3.22. Additional tier 1 capital elements are:

(1) Instruments (plus any related surplus) that meet the following criteria:

(i) The instrument is issued and paid-

(ii) The instrument is subordinated to depositors, general creditors, and subordinated debt holders of the national bank or Federal savings association in a receivership, insolvency, liquidation, or similar proceeding:

(iii) The instrument is not secured, not covered by a guarantee of the national bank or Federal savings association or of an affiliate of the national bank or Federal savings association, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument;

(iv) The instrument has no maturity date and does not contain a dividend step-up or any other term or feature that creates an incentive to redeem; and

(v) If callable by its terms, the instrument may be called by the national bank or Federal savings association only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called earlier than five years upon the occurrence of a regulatory event that precludes the instrument from being included in additional tier 1 capital, a tax event, or if the issuing entity is required to register as an investment

 $^{^7} See \ \S 3.22$ for specific adjustments related to AOCI.

company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*). In addition:

- (A) The national bank or Federal savings association must receive prior approval from the OCC to exercise a call option on the instrument.
- (B) The national bank or Federal savings association does not create at issuance of the instrument, through any action or communication, an expectation that the call option will be exercised.
- (C) Prior to exercising the call option, or immediately thereafter, the national bank or Federal savings association must either: Replace the instrument to be called with an equal amount of instruments that meet the criteria under paragraph (b) of this section or this paragraph (c); or demonstrate to the satisfaction of the OCC that following redemption, the national bank or Federal savings association will continue to hold capital commensurate with its risk.
- (vi) Redemption or repurchase of the instrument requires prior approval from the OCC.
- (vii) The national bank or Federal savings association has full discretion at all times to cancel dividends or other distributions on the instrument without triggering an event of default, a requirement to make a payment-inkind, or an imposition of other restrictions on the national bank or Federal savings association except in relation to any distributions to holders of common stock or instruments that are pari passu with the instrument.
- (viii) Any cash dividend payments on the instrument are paid out of the national bank's or Federal savings association's net income or retained earnings and are not subject to a limit imposed by the contractual terms governing the instrument.
- (ix) The instrument does not have a credit-sensitive feature, such as a dividend rate that is reset periodically based in whole or in part on the national bank's or Federal savings association's credit quality, but may have a dividend rate that is adjusted periodi-

- (x) The paid-in amount is classified as equity under GAAP.
- (xi) The national bank or Federal savings association, or an entity that the national bank or Federal savings association controls, did not purchase or directly or indirectly fund the purchase of the instrument.
- (xii) The instrument does not have any features that would limit or discourage additional issuance of capital by the national bank or Federal savings association, such as provisions that require the national bank or Federal savings association to compensate holders of the instrument if a new instrument is issued at a lower price during a specified time frame.

(xiii) If the instrument is not issued directly by the national bank or Federal savings association or by a subsidiary of the national bank or Federal savings association that is an operating entity, the only asset of the issuing entity is its investment in the capital of the national bank or Federal savings association, and proceeds must be immediately available without limitation to the national bank or Federal savings association or to the national bank's or Federal savings association's top-tier holding company in a form which meets or exceeds all of the other criteria for additional tier 1 capital instruments.9

(xiv) For an advanced approaches national bank or Federal savings association, the governing agreement, offering circular, or prospectus of an instrument issued after the date upon which the national bank or Federal savings association becomes subject to this part as set forth in §3.1(f) must disclose that the holders of the instrument may be fully subordinated to interests held by the U.S. government in the event that the national bank or Federal savings association enters into a receivership, insolvency, liquidation, or similar proceeding.

cally independent of the national bank's or Federal savings association's credit quality, in relation to general market interest rates or similar adjustments.

⁸Replacement can be concurrent with redemption of existing additional tier 1 capital instruments

⁹De minimis assets related to the operation of the issuing entity can be disregarded for purposes of this criterion.

- (2) Tier 1 minority interest, subject to the limitations in §3.21(d), that is not included in the national bank's or Federal savings association's common equity tier 1 capital.
- (3) Any and all instruments that qualified as tier 1 capital under the OCC's general risk-based capital rules under appendix A to this part (national banks), 12 CFR part 167 (Federal savings associations) as then in effect, that were issued under the Small Business Jobs Act of 2010 ¹⁰ or prior to October 4, 2010, under the Emergency Economic Stabilization Act of 2008. ¹¹
- (4) Notwithstanding the criteria for additional tier 1 capital instruments referenced above:
- (i) An instrument issued by a national bank or Federal savings association and held in trust for the benefit of its employees as part of an employee stock ownership plan does not violate any of the criteria in paragraph (c)(1)(iii) of this section, provided that any repurchase is required solely by virtue of ERISA for an instrument of a national bank or Federal savings association that is not publicly-traded. In addition, an instrument issued by a national bank or Federal savings association to its employee stock ownership plan does not violate the criteria in paragraph (c)(1)(v) or paragraph (c)(1)(xi) of this section; and
- (ii) An instrument with terms that provide that the instrument may be called earlier than five years upon the occurrence of a rating agency event does not violate the criterion in paragraph (c)(1)(v) of this section provided that the instrument was issued and included in a national bank's or Federal savings association's tier 1 capital prior to January 1, 2014, and that such instrument satisfies all other criteria under this §3.20(c).
- (d) *Tier 2 Capital*. Tier 2 capital is the sum of tier 2 capital elements and any related surplus, minus regulatory adjustments and deductions in §3.22. Tier 2 capital elements are:
- (1) Instruments (plus related surplus) that meet the following criteria:
- (i) The instrument is issued and paidin;
 - $^{10}\,\mathrm{Public}$ Law 111–240; 124 Stat. 2504 (2010).
 - ¹¹ Public Law 110-343, 122 Stat. 3765 (2008).

- (ii) The instrument is subordinated to depositors and general creditors of the national bank or Federal savings association;
- (iii) The instrument is not secured, not covered by a guarantee of the national bank or Federal savings association or of an affiliate of the national bank or Federal savings association, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument in relation to more senior claims;
- (iv) The instrument has a minimum original maturity of at least five years. At the beginning of each of the last five years of the life of the instrument, the amount that is eligible to be included in tier 2 capital is reduced by 20 percent of the original amount of the instrument (net of redemptions) and is excluded from regulatory capital when the remaining maturity is less than one year. In addition, the instrument must not have any terms or features that require, or create significant incentives for, the national bank or Federal savings association to redeem the instrument prior to maturity; 12 and
- (v) The instrument, by its terms, may be called by the national bank or Federal savings association only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called sooner upon the occurrence of an event that would preclude the instrument from being included in tier 2 capital, a tax event, or if the issuing entity is required to register as an investment company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.). In addition:
- (A) The national bank or Federal savings association must receive the prior approval of the OCC to exercise a call option on the instrument.
- (B) The national bank or Federal savings association does not create at issuance, through action or communication, an expectation the call option will be exercised.
- (C) Prior to exercising the call option, or immediately thereafter, the

¹² An instrument that by its terms automatically converts into a tier 1 capital instrument prior to five years after issuance complies with the five-year maturity requirement of this criterion.

national bank or Federal savings association must either: Replace any amount called with an equivalent amount of an instrument that meets the criteria for regulatory capital under this section; ¹³ or demonstrate to the satisfaction of the OCC that following redemption, the national bank or Federal savings association would continue to hold an amount of capital that is commensurate with its risk.

(vi) The holder of the instrument must have no contractual right to accelerate payment of principal or interest on the instrument, except in the event of a receivership, insolvency, liquidation, or similar proceeding of the national bank or Federal savings association.

(vii) The instrument has no creditsensitive feature, such as a dividend or interest rate that is reset periodically based in whole or in part on the national bank's or Federal savings association's credit standing, but may have a dividend rate that is adjusted periodically independent of the national bank's or Federal savings association's credit standing, in relation to general market interest rates or similar adjustments.

(viii) The national bank or Federal savings association, or an entity that the national bank or Federal savings association controls, has not purchased and has not directly or indirectly funded the purchase of the instrument.

(ix) If the instrument is not issued directly by the national bank or Federal savings association or by a subsidiary of the national bank or Federal savings association that is an operating entity, the only asset of the issuing entity is its investment in the capital of the national bank or Federal savings association, and proceeds must be immediately available without limitation to the national bank or Federal savings association or the national bank's or Federal savings association's top-tier holding company in a form that meets or exceeds all the other criteria for tier

2 capital instruments under this section. 14

(x) Redemption of the instrument prior to maturity or repurchase requires the prior approval of the OCC.

(xi) For an advanced approaches national bank or Federal savings association, the governing agreement, offering circular, or prospectus of an instrument issued after the date on which the advanced approaches national bank or Federal savings association becomes subject to this part under §3.1(f) must disclose that the holders of the instrument may be fully subordinated to interests held by the U.S. government in the event that the national bank or Federal savings association enters into a receivership, insolvency, liquidation, or similar proceeding.

(2) Total capital minority interest, subject to the limitations set forth in §3.21(e), that is not included in the national bank's or Federal savings association's tier 1 capital.

(3) ALLL up to 1.25 percent of the national bank's or Federal savings association's standardized total risk-weighted assets not including any amount of the ALLL (and excluding in the case of a market risk national bank or Federal savings association, its standardized market risk-weighted assets).

(4) Any instrument that qualified as tier 2 capital under the OCC's general risk-based capital rules under appendix A to this part, 12 CFR part 167 as then in effect, that were issued under the Small Business Jobs Act of 2010, 15 or prior to October 4, 2010, under the Emergency Economic Stabilization Act of 2008. 16

(5) For a national bank or Federal savings association that makes an AOCI opt-out election (as defined in paragraph (b)(2) of this section), 45 percent of pretax net unrealized gains on available-for-sale preferred stock classified as an equity security under GAAP and available-for-sale equity exposures

¹³ A national bank or Federal savings association may replace tier 2 capital instruments concurrent with the redemption of existing tier 2 capital instruments.

¹⁴A national bank or Federal savings association may disregard *de minimis* assets related to the operation of the issuing entity for purposes of this criterion

¹⁵ Public Law 111–240; 124 Stat. 2504 (2010).

¹⁶ Public Law 110-343, 122 Stat. 3765 (2008).

§3.21

- (6) Notwithstanding the criteria for tier 2 capital instruments referenced above, an instrument with terms that provide that the instrument may be called earlier than five years upon the occurrence of a rating agency event does not violate the criterion in paragraph (d)(1)(v) of this section provided that the instrument was issued and included in a national bank's or Federal savings association's tier 1 or tier 2 capital prior to January 1, 2014, and that such instrument satisfies all other criteria under this paragraph (d).
- (e) OCC approval of a capital element. (1) A national bank or Federal savings association must receive OCC prior approval to include a capital element (as listed in this section) in its common equity tier 1 capital, additional tier 1 capital, or tier 2 capital unless the element:
- (i) Was included in a national bank's or Federal savings association's tier 1 capital or tier 2 capital prior to May 19, 2010 in accordance with the OCC's risk-based capital rules that were effective as of that date and the underlying instrument may continue to be included under the criteria set forth in this section: or
- (ii) Is equivalent, in terms of capital quality and ability to absorb losses with respect to all material terms, to a regulatory capital element the OCC determined may be included in regulatory capital pursuant to paragraph (e)(3) of this section.
- (2) When considering whether a national bank or Federal savings association may include a regulatory capital element in its common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, the OCC will consult with the Federal Deposit Insurance Corporation and Federal Reserve Board.
- (3) After determining that a regulatory capital element may be included in a national bank's or Federal savings association's common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, the OCC will make its decision publicly available, including a brief description of the material terms of the regulatory capital element and the rationale for the determination.

[78 FR 62157, 62273, 62274, Oct. 11, 2013]

§ 3.21 Minority interest.

- (a) Applicability. For purposes of §3.20, a national bank or Federal savings association is subject to the minority interest limitations in this section if:
- (1) A consolidated subsidiary of the national bank or Federal savings association has issued regulatory capital that is not owned by the national bank or Federal savings association; and
- (2) For each relevant regulatory capital ratio of the consolidated subsidiary, the ratio exceeds the sum of the subsidiary's minimum regulatory capital requirements plus its capital conservation buffer.
- (b) Difference in capital adequacy standards at the subsidiary level. For purposes of the minority interest calculations in this section, if the consolidated subsidiary issuing the capital is not subject to capital adequacy standards similar to those of the national bank or Federal savings association, the national bank or Federal savings association must assume that the capital adequacy standards of the national bank or Federal savings association apply to the subsidiary.
- (c) Common equity tier 1 minority interest includable in the common equity tier 1 capital of the national bank or Federal savings association. For each consolidated subsidiary of a national bank or Federal savings association, the amount of common equity tier 1 minority interest the national bank or Federal savings association may include in common equity tier 1 capital is equal to:
- (1) The common equity tier 1 minority interest of the subsidiary; minus
- (2) The percentage of the subsidiary's common equity tier 1 capital that is not owned by the national bank or Federal savings association, multiplied by the difference between the common equity tier 1 capital of the subsidiary and the lower of:
- (i) The amount of common equity tier 1 capital the subsidiary must hold, or would be required to hold pursuant to paragraph (b) of this section, to avoid restrictions on distributions and discretionary bonus payments under §3.11 or equivalent standards established by the subsidiary's home country supervisor; or

- (ii)(A) The standardized total riskweighted assets of the national bank or Federal savings association that relate to the subsidiary multiplied by
- (B) The common equity tier 1 capital ratio the subsidiary must maintain to avoid restrictions on distributions and discretionary bonus payments under §3.11 or equivalent standards established by the subsidiary's home country supervisor.
- (d) Tier 1 minority interest includable in the tier 1 capital of the national bank or Federal savings association. For each consolidated subsidiary of the national bank or Federal savings association, the amount of tier 1 minority interest the national bank or Federal savings association may include in tier 1 capital is equal to:
- (1) The tier 1 minority interest of the subsidiary; minus
- (2) The percentage of the subsidiary's tier 1 capital that is not owned by the national bank or Federal savings association multiplied by the difference between the tier 1 capital of the subsidiary and the lower of:
- (i) The amount of tier 1 capital the subsidiary must hold, or would be required to hold pursuant to paragraph (b) of this section, to avoid restrictions on distributions and discretionary bonus payments under §3.11 or equivalent standards established by the subsidiary's home country supervisor, or
- (ii)(A) The standardized total risk-weighted assets of the national bank or Federal savings association that relate to the subsidiary multiplied by
- (B) The tier 1 capital ratio the subsidiary must maintain to avoid restrictions on distributions and discretionary bonus payments under §3.11 or equivalent standards established by the subsidiary's home country supervisor.
- (e) Total capital minority interest includable in the total capital of the national bank or Federal savings association. For each consolidated subsidiary of the national bank or Federal savings association, the amount of total capital minority interest the national bank or Federal savings association may include in total capital is equal to:
- (1) The total capital minority interest of the subsidiary; minus

- (2) The percentage of the subsidiary's total capital that is not owned by the national bank or Federal savings association multiplied by the difference between the total capital of the subsidiary and the lower of:
- (i) The amount of total capital the subsidiary must hold, or would be required to hold pursuant to paragraph (b) of this section, to avoid restrictions on distributions and discretionary bonus payments under §3.11 or equivalent standards established by the subsidiary's home country supervisor, or
- (ii)(A) The standardized total riskweighted assets of the national bank or Federal savings association that relate to the subsidiary multiplied by
- (B) The total capital ratio the subsidiary must maintain to avoid restrictions on distributions and discretionary bonus payments under §3.11 or equivalent standards established by the subsidiary's home country supervisor.

§ 3.22 Regulatory capital adjustments and deductions.

- (a) Regulatory capital deductions from common equity tier 1 capital. A national bank or Federal savings association must deduct from the sum of its common equity tier 1 capital elements the items set forth in this paragraph (a):
- (1) Goodwill, net of associated deferred tax liabilities (DTLs) in accordance with paragraph (e) of this section, including goodwill that is embedded in the valuation of a significant investment in the capital of an unconsolidated financial institution in the form of common stock (and that is reflected in the consolidated financial statements of the national bank or Federal savings association), in accordance with paragraph (d) of this section;
- (2) Intangible assets, other than MSAs, net of associated DTLs in accordance with paragraph (e) of this section:
- (3) Deferred tax assets (DTAs) that arise from net operating loss and tax credit carryforwards net of any related valuation allowances and net of DTLs in accordance with paragraph (e) of this section;
- (4) Any gain-on-sale in connection with a securitization exposure;
- (5)(i) Any defined benefit pension fund net asset, net of any associated

DTL in accordance with paragraph (e) of this section, held by a depository institution holding company. With the prior approval of the OCC, this deduction is not required for any defined benefit pension fund net asset to the extent the depository institution holding company has unrestricted and unfettered access to the assets in that fund

- (ii) For an insured depository institution, no deduction is required.
- (iii) A national bank or Federal savings association must risk weight any portion of the defined benefit pension fund asset that is not deducted under paragraphs (a)(5)(i) or (a)(5)(ii) of this section as if the national bank or Federal savings association directly holds a proportional ownership share of each exposure in the defined benefit pension fund.
- (6) For an advanced approaches national bank or Federal savings association that has completed the parallel run process and that has received notification from the OCC pursuant to §3.121(d), the amount of expected credit loss that exceeds its eligible credit reserves; and
- (7) With respect to a financial subsidiary, the aggregate amount of the national bank's or Federal savings association's outstanding equity investment, including retained earnings, in its financial subsidiaries (as defined in [12 CFR 5.39 (OCC); 12 CFR 208.77 (Board))]. A national bank or Federal savings association must not consolidate the assets and liabilities of a financial subsidiary with those of the parent bank, and no other deduction is required under paragraph (c) of this section for investments in the capital instruments of financial subsidiaries.
- (8)(i) A Federal savings association must deduct the aggregate amount of its outstanding investments (both equity and debt) in, and extensions of credit to, subsidiaries that are not includable subsidiaries as defined in paragraph (a)(8)(iv) of this section and may not consolidate the assets and liabilities of the subsidiary with those of the Federal savings association. Any such deductions shall be deducted from assets and common equity tier 1 except as provided in paragraphs (a)(8)(ii) and (iii) of this section.

- (ii) If a Federal savings association has any investments (both debt and equity) in, or extensions or credit to, one or more subsidiaries engaged in any activity that would not fall within the scope of activities in which includable subsidiaries as defined in paragraph (a)(8)(iv) of this section may engage, it must deduct such investments and extensions of credit from assets and, thus, common equity tier 1 in accordance with paragraph (a)(8)(i) of this section.
- (iii) If a Federal savings association holds a subsidiary (either directly or through a subsidiary) that is itself a domestic depository institution, the OCC may, in its sole discretion upon determining that the amount of common equity tier 1 that would be required would be higher if the assets and liabilities of such subsidiary were consolidated with those of the parent Federal savings association than the amount that would be required if the parent Federal savings association's investment were deducted pursuant to paragraphs (a)(8)(i) and (ii) of this section, consolidate the assets and liabilities of that subsidiary with those of the parent Federal savings association in calculating the capital adequacy of the parent Federal savings association, regardless of whether the subsidiary would otherwise be an includable subsidiary as defined in paragraph (a)(8)(iv) of this section.
- (iv) For purposes of this section, the term includable subsidiary means a subsidiary of a Federal savings association that:
- (A) Is engaged solely in activities not impermissible for a national bank;
- (B) Is engaged in activities not permissible for a national bank, but only if acting solely as agent for its customers and such agency position is clearly documented in the Federal savings association's files;
- (C) Is engaged solely in mortgagebanking activities;
- (D)(I) Is itself an insured depository institution or a company the sole investment of which is an insured depository institution; and
- (2) Was acquired by the parent Federal savings association prior to May 1, 1989: or

- (E) Was a subsidiary of any Federal savings association existing as a Federal savings association on August 9, 1989:
- (1) That was chartered prior to October 15, 1982, as a savings bank or a cooperative bank under state law; or
- (2) That acquired its principal assets from an association that was chartered prior to October 15, 1982, as a savings bank or a cooperative bank under state law.
- (b) Regulatory adjustments to common equity tier 1 capital. (1) A national bank or Federal savings association must adjust the sum of common equity tier 1 capital elements pursuant to the requirements set forth in this paragraph (b). Such adjustments to common equity tier 1 capital must be made net of the associated deferred tax effects.
- (i) A national bank or Federal savings association that makes an AOCI opt-out election (as defined in paragraph (b)(2) of this section), must make the adjustments required under §3.22(b)(2)(i).
- (ii) A national bank or Federal savings association that is an advanced approaches national bank or Federal savings association, and a national bank or Federal savings association that has not made an AOCI opt-out election (as defined in paragraph (b)(2) of this section), must deduct any accumulated net gains and add any accumulated net losses on cash flow hedges included in AOCI that relate to the hedging of items that are not recognized at fair value on the balance sheet.
- (iii) A national bank or Federal savings association must deduct any net gain and add any net loss related to changes in the fair value of liabilities that are due to changes in the national bank's or Federal savings association's own credit risk. An advanced approaches national bank or Federal savings association also must deduct the credit spread premium over the risk free rate for derivatives that are liabilities.
- (2) AOCI opt-out election. (i) A national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association may make a one-time election to opt out of the requirement

to include all components of AOCI (with the exception of accumulated net gains and losses on cash flow hedges related to items that are not fair-valued on the balance sheet) in common equity tier 1 capital (AOCI opt-out election). A national bank or Federal savings association that makes an AOCI opt-out election in accordance with this paragraph (b)(2) must adjust common equity tier 1 capital as follows:

§ 3.22

- (A) Subtract any net unrealized gains and add any net unrealized losses on available-for-sale securities;
- (B) Subtract any net unrealized losses on available-for-sale preferred stock classified as an equity security under GAAP and available-for-sale equity exposures;
- (C) Subtract any accumulated net gains and add any accumulated net losses on cash flow hedges;
- (D) Subtract any amounts recorded in AOCI attributed to defined benefit postretirement plans resulting from the initial and subsequent application of the relevant GAAP standards that pertain to such plans (excluding, at the national bank's or Federal savings association's option, the portion relating to pension assets deducted under paragraph (a)(5) of this section); and
- (E) Subtract any net unrealized gains and add any net unrealized losses on held-to-maturity securities that are included in AOCI.
- (ii) A national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association must make its AOCI opt-out election in its Call Report filed for the first regulatory reporting period after the date required for such national bank or Federal savings association to comply with subpart A of this part as set forth in §3.1(f).
- (iii) With respect to a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, each of its subsidiary banking organizations that is subject to regulatory capital requirements issued by the Board of Governors of the Federal Reserve, the Federal Deposit Insurance

Corporation, or the Office of the Comptroller of the Currency ¹⁷ must elect the same option as the national bank or Federal savings association pursuant to this paragraph (b)(2).

(iv) With prior notice to the OCC, a national bank or Federal savings association resulting from a merger, acquisition, or purchase transaction and that is not an advanced approaches national bank or Federal savings association may change its AOCI opt-out election in its Call Report filed for the first reporting period after the date required for such national bank or Federal savings association to comply with subpart A of this part as set forth in §3.1(f) if:

(A) Other than as set forth in paragraph (b)(2)(iv)(C) of this section, the merger, acquisition, or purchase transaction involved the acquisition or purchase of all or substantially all of either the assets or voting stock of another banking organization that is subject to regulatory capital requirements issued by the Board of Governors of the Federal Reserve, the Federal Deposit Insurance Corporation, or the Office of the Comptroller of the Currency; 18

(B) Prior to the merger, acquisition, or purchase transaction, only one of the banking organizations involved in the transaction made an AOCI opt-out election under this section; and

(C) A national bank or Federal savings association may, with the prior approval of the OCC, change its AOCI opt-out election under this paragraph (b) in the case of a merger, acquisition, or purchase transaction that meets the requirements set forth at paragraph (b)(2)(iv)(B) of this section, but does not meet the requirements of paragraph (b)(2)(iv)(A). In making such a determination, the OCC may consider the terms of the merger, acquisition, or purchase transaction, as well as the extent of any changes to the risk profile, complexity, and scope of operations of the national bank or Federal savings

(OCC); 12 CFR part 225 (Board); 12 CFR part

association resulting from the merger, acquisition, or purchase transaction.

(c) Deductions from regulatory capital related to investments in capital instruments ¹⁹—(1) Investment in the national bank's or Federal savings association's own capital instruments. A national bank or Federal savings association must deduct an investment in the national bank's or Federal savings association's own capital instruments as follows:

(i) A national bank or Federal savings association must deduct an investment in the national bank's or Federal savings association's own common stock instruments from its common equity tier 1 capital elements to the extent such instruments are not excluded from regulatory capital under §3.20(b)(1);

(ii) A national bank or Federal savings association must deduct an investment in the national bank's or Federal savings association's own additional tier 1 capital instruments from its additional tier 1 capital elements; and

(iii) A national bank or Federal savings association must deduct an investment in the national bank's or Federal savings association's own tier 2 capital instruments from its tier 2 capital elements.

(2) Corresponding deduction approach. For purposes of subpart C of this part, the corresponding deduction approach is the methodology used for the deductions from regulatory capital related to reciprocal cross holdings (as described in paragraph (c)(3) of this section), non-significant investments in the capital of unconsolidated financial institutions (as described in paragraph (c)(4) of this section), and non-common stock significant investments in the capital of unconsolidated financial institutions (as described in paragraph (c)(5) of this section). Under the corresponding deduction approach, a national bank or Federal savings association must make deductions from the component of capital for which the underlying instrument would qualify if it were issued by the national bank or

^{325,} and 12 CFR part 390 (FDIC).

¹⁸These rules include the regulatory capital requirements set forth at 12 CFR part 3 (OCC); 12 CFR part 225 (Board); 12 CFR part 325, and 12 CFR part 390 (FDIC).

¹⁹The national bank or Federal savings association must calculate amounts deducted under paragraphs (c) through (f) of this section after it calculates the amount of ALLL includable in tier 2 capital under §3.20(d)(3).

Federal savings association itself, as described in paragraphs (c)(2)(i)–(iii) of this section. If the national bank or Federal savings association does not have a sufficient amount of a specific component of capital to effect the required deduction, the shortfall must be deducted according to paragraph (f) of this section.

- (i) If an investment is in the form of an instrument issued by a financial institution that is not a regulated financial institution, the national bank or Federal savings association must treat the instrument as:
- (A) A common equity tier 1 capital instrument if it is common stock or represents the most subordinated claim in liquidation of the financial institution; and
- (B) An additional tier 1 capital instrument if it is subordinated to all creditors of the financial institution and is senior in liquidation only to common shareholders.
- (ii) If an investment is in the form of an instrument issued by a regulated financial institution and the instrument does not meet the criteria for common equity tier 1, additional tier 1 or tier 2 capital instruments under §3.20, the national bank or Federal savings association must treat the instrument as:
- (A) A common equity tier 1 capital instrument if it is common stock included in GAAP equity or represents the most subordinated claim in liquidation of the financial institution;
- (B) An additional tier 1 capital instrument if it is included in GAAP equity, subordinated to all creditors of the financial institution, and senior in a receivership, insolvency, liquidation, or similar proceeding only to common shareholders; and
- (C) A tier 2 capital instrument if it is not included in GAAP equity but considered regulatory capital by the primary supervisor of the financial institution.
- (iii) If an investment is in the form of a non-qualifying capital instrument (as defined in $\S 3.300(c)$), the national bank or Federal savings association must treat the instrument as:
- (A) An additional tier 1 capital instrument if such instrument was included in the issuer's tier 1 capital prior to May 19, 2010; or

- (B) A tier 2 capital instrument if such instrument was included in the issuer's tier 2 capital (but not includable in tier 1 capital) prior to May 19, 2010.
- (3) Reciprocal cross holdings in the capital of financial institutions. A national bank or Federal savings association must deduct investments in the capital of other financial institutions it holds reciprocally, where such reciprocal cross holdings result from a formal or informal arrangement to swap, exchange, or otherwise intend to hold each other's capital instruments, by applying the corresponding deduction approach.
- (4) Non-significant investments in the capital of unconsolidated financial institutions. (i) A national bank or Federal savings association must deduct its non-significant investments in the capital of unconsolidated financial institutions (as defined in §3.2) that, in the aggregate, exceed 10 percent of the sum of the national bank's or Federal savings association's common equity tier 1 capital elements minus all deductions from and adjustments to common equity tier 1 capital elements required under paragraphs (a) through (c)(3) of this section (the 10 percent threshold for non-significant investments) by applying the corresponding deduction approach.²⁰ The deductions described in this section are net of associated DTLs in accordance with paragraph (e) of this section. In addition, a national bank or Federal savings association that underwrites a failed underwriting, with the prior written approval of the OCC, for the period of time stipulated by the OCC, is not required to deduct a non-significant investment in the capital of an unconsolidated financial institution pursuant to this paragraph

²⁰With the prior written approval of the OCC, for the period of time stipulated by the OCC, a national bank or Federal savings association is not required to deduct a non-significant investment in the capital instrument of an unconsolidated financial institution pursuant to this paragraph if the financial institution is in distress and if such investment is made for the purpose of providing financial support to the financial institution, as determined by the OCC.

- (c) to the extent the investment is related to the failed underwriting.²¹
- (ii) The amount to be deducted under this section from a specific capital component is equal to:
- (A) The national bank's or Federal savings association's non-significant investments in the capital of unconsolidated financial institutions exceeding the 10 percent threshold for non-significant investments, multiplied by
- (B) The ratio of the national bank's or Federal savings association's non-significant investments in the capital of unconsolidated financial institutions in the form of such capital component to the national bank's or Federal savings association's total non-significant investments in unconsolidated financial institutions.
- (5) Significant investments in the capital of unconsolidated financial institutions that are not in the form of common stock. A national bank or Federal savings association must deduct its significant investments in the capital of unconsolidated financial institutions that are not in the form of common stock by applying the corresponding deduction approach.²² The deductions described in this section are net of associated DTLs in accordance with paragraph (e) of this section. In addition, with the prior written approval of the OCC, for the period of time stipulated by the OCC, a national bank or Federal savings association that underwrites a failed underwriting is not required to deduct a significant investment in the capital of an unconsolidated financial institution pursuant to this paragraph

²¹ Any non-significant investments in the capital of unconsolidated financial institutions that do not exceed the 10 percent threshold for non-significant investments under this section must be assigned the appropriate risk weight under subparts D, E, or F of this part, as applicable.

²²With prior written approval of the OCC, for the period of time stipulated by the OCC, a national bank or Federal savings association is not required to deduct a significant investment in the capital instrument of an unconsolidated financial institution in distress which is not in the form of common stock pursuant to this section if such investment is made for the purpose of providing financial support to the financial institution as determined by the OCC.

- (c) if such investment is related to such failed underwriting.
- (d) Items subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds. (1) A national bank or Federal savings association must deduct from common equity tier 1 capital elements the amount of each of the items set forth in this paragraph (d) that, individually, exceeds 10 percent of the sum of the national bank's or Federal savings association's common equity tier 1 capital elements, less adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c) of this section (the 10 percent common equity tier 1 capital deduction threshold).
- (i) DTAs arising from temporary differences that the national bank or Federal savings association could not realthrough net operating carrybacks, net of any related valuation allowances and net of DTLs, in accordance with paragraph (e) of this section. A national bank or Federal savings association is not required to deduct from the sum of its common equity tier 1 capital elements DTAs (net of any related valuation allowances and net of DTLs, in accordance with §3.22(e)) arising from timing differences that the national bank or Federal savings association could realize through net operating loss carrybacks. The national bank or Federal savings association must risk weight these assets at 100 percent. For a national bank or Federal savings association that is a member of a consolidated group for tax purposes, the amount of DTAs that could be realized through net operating loss carrybacks may not exceed the amount that the national bank or Federal savings association could reasonably expect to have refunded by its parent holding company.
- (ii) MSAs net of associated DTLs, in accordance with paragraph (e) of this section.
- (iii) Significant investments in the capital of unconsolidated financial institutions in the form of common stock, net of associated DTLs in accordance with paragraph (e) of this section.²³ Significant investments in the

²³With the prior written approval of the OCC, for the period of time stipulated by the

capital of unconsolidated financial institutions in the form of common stock subject to the 10 percent common equity tier 1 capital deduction threshold may be reduced by any goodwill embedded in the valuation of such investments deducted by the national bank or Federal savings association pursuant to paragraph (a)(1) of this section. In addition, with the prior written approval of the OCC, for the period of time stipulated by the OCC, a national bank or Federal savings association that underwrites a failed underwriting is not required to deduct a significant investment in the capital of an unconsolidated financial institution in the form of common stock pursuant to this paragraph (d) if such investment is related to such failed underwriting.

(2) A national bank or Federal savings association must deduct from common equity tier 1 capital elements the items listed in paragraph (d)(1) of this section that are not deducted as a result of the application of the 10 percent common equity tier 1 capital deduction threshold, and that, in aggregate, exceed 17.65 percent of the sum of the national bank's or Federal savings association's common equity tier 1 capital elements, minus adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c) of this section, minus the items listed in paragraph (d)(1) of this section (the 15 percent common equity tier 1 capital deduction threshold). Any goodwill that has been deducted under paragraph (a)(1) of this section can be excluded from the significant investments in the capital of unconsolidated financial institutions in the form of common stock.24

OCC, a national bank or Federal savings association is not required to deduct a significant investment in the capital instrument of an unconsolidated financial institution in distress in the form of common stock pursuant to this section if such investment is made for the purpose of providing financial support to the financial institution as determined by the OCC.

²⁴The amount of the items in paragraph (d) of this section that is not deducted from common equity tier 1 capital pursuant to this section must be included in the risk-weighted assets of the national bank or Federal savings association and assigned a 250 percent risk weight.

- (3) For purposes of calculating the amount of DTAs subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds, a national bank or Federal savings association may exclude DTAs and DTLs relating to adjustments made to common equity tier 1 capital under paragraph (b) of this section. A national bank or Federal savings association that elects to exclude DTAs relating to adjustments under paragraph (b) of this section also must exclude DTLs and must do so consistently in all future calculations. A national bank or Federal savings association may change its exclusion preference only after obtaining the prior approval of the OCC.
- (e) Netting of DTLs against assets subject to deduction. (1) Except as described in paragraph (e)(3) of this section, netting of DTLs against assets that are subject to deduction under this section is permitted, but not required, if the following conditions are met:
- (i) The DTL is associated with the asset; and
- (ii) The DTL would be extinguished if the associated asset becomes impaired or is derecognized under GAAP.
- (2) A DTL may only be netted against a single asset.
- (3) For purposes of calculating the amount of DTAs subject to the threshold deduction in paragraph (d) of this section, the amount of DTAs that arise from net operating loss and tax credit carryforwards, net of any related valuation allowances, and of DTAs arising from temporary differences that the national bank or Federal savings association could not realize through net operating loss carrybacks, net of any related valuation allowances, may be offset by DTLs (that have not been netted against assets subject to deduction pursuant to paragraph (e)(1) of this section) subject to the conditions set forth in this paragraph (e).
- (i) Only the DTAs and DTLs that relate to taxes levied by the same taxation authority and that are eligible for offsetting by that authority may be offset for purposes of this deduction.
- (ii) The amount of DTLs that the national bank or Federal savings association nets against DTAs that arise from net operating loss and tax credit

carryforwards, net of any related valuation allowances, and against DTAs arising from temporary differences that the national bank or Federal savings association could not realize through net operating loss carrybacks, net of any related valuation allowances, must be allocated in proportion to the amount of DTAs that arise from net operating loss and tax credit carryforwards (net of any related valuation allowances, but before any offsetting of DTLs) and of DTAs arising from temporary differences that the national bank or Federal savings association could not realize through net operating loss carrybacks (net of any related valuation allowances, but before any offsetting of DTLs), respectively.

- (4) A national bank or Federal savings association may offset DTLs embedded in the carrying value of a leveraged lease portfolio acquired in a business combination that are not recognized under GAAP against DTAs that are subject to paragraph (d) of this section in accordance with this paragraph (e)
- (5) A national bank or Federal savings association must net DTLs against assets subject to deduction under this section in a consistent manner from reporting period to reporting period. A national bank or Federal savings association may change its preference regarding the manner in which it nets DTLs against specific assets subject to deduction under this section only after obtaining the prior approval of the OCC.
- (f) Insufficient amounts of a specific regulatory capital component to effect deductions. Under the corresponding deduction approach, if a national bank or Federal savings association does not have a sufficient amount of a specific component of capital to effect the required deduction after completing the deductions required under paragraph (d) of this section, the national bank or Federal savings association must deduct the shortfall from the next higher (that is, more subordinated) component of regulatory capital.
- (g) Treatment of assets that are deducted. A national bank or Federal savings association must exclude from standardized total risk-weighted assets and, as applicable, advanced ap-

proaches total risk-weighted assets any item deducted from regulatory capital under paragraphs (a), (c), and (d) of this section.

- (h) Net long position. (1) For purposes of calculating an investment in the national bank's or Federal savings association's own capital instrument and an investment in the capital of an unconsolidated financial institution under this section, the net long position is the gross long position in the underlying instrument determined in accordance with paragraph (h)(2) of this section, as adjusted to recognize a short position in the same instrument calculated in accordance with paragraph (h)(3) of this section.
- (2) *Gross long position*. The gross long position is determined as follows:
- (i) For an equity exposure that is held directly, the adjusted carrying value as that term is defined in §3.51(b):
- (ii) For an exposure that is held directly and is not an equity exposure or a securitization exposure, the exposure amount as that term is defined in §3.2;
- (iii) For an indirect exposure, the national bank's or Federal savings association's carrying value of the investment in the investment fund, provided that, alternatively:
- (A) A national bank or Federal savings association may, with the prior approval of the OCC, use a conservative estimate of the amount of its investment in its own capital instruments or the capital of an unconsolidated financial institution held through a position in an index; or
- (B) A national bank or Federal savings association may calculate the gross long position for the national bank's or Federal savings association's own capital instruments or the capital of an unconsolidated financial institution by multiplying the national bank's or Federal savings association's carrying value of its investment in the investment fund by either:
- (1) The highest stated investment limit (in percent) for investments in the national bank's or Federal savings association's own capital instruments or the capital of unconsolidated financial institutions as stated in the prospectus, partnership agreement, or

similar contract defining permissible investments of the investment fund; or

- (2) The investment fund's actual holdings of own capital instruments or the capital of unconsolidated financial institutions.
- (iv) For a synthetic exposure, the amount of the national bank's or Federal savings association's loss on the exposure if the reference capital instrument were to have a value of zero.
- (3) Adjustments to reflect a short position. In order to adjust the gross long position to recognize a short position in the same instrument, the following criteria must be met:
- (i) The maturity of the short position must match the maturity of the long position, or the short position has a residual maturity of at least one year (maturity requirement); or
- (ii) For a position that is a trading asset or trading liability (whether onor off-balance sheet) as reported on the national bank's or Federal savings association's Call Report, if the national bank or Federal savings association has a contractual right or obligation to sell the long position at a specific point in time and the counterparty to the contract has an obligation to purchase the long position if the national bank or Federal savings association exercises its right to sell, this point in time may be treated as the maturity of the long position such that the maturity of the long position and short position are deemed to match for purposes of the maturity requirement, even if the maturity of the short position is less than one year; and
- (iii) For an investment in the national bank's or Federal savings association's own capital instrument under paragraph (c)(1) of this section or an investment in a capital of an unconsolidated financial institution under paragraphs (c)(4), (c)(5), and (d)(1)(iii) of this section.
- (A) A national bank or Federal savings association may only net a short position against a long position in the national bank's or Federal savings association's own capital instrument under paragraph (c)(1) of this section if the short position involves no counterparty credit risk.
- (B) A gross long position in a national bank's or Federal savings asso-

ciation's own capital instrument or in a capital instrument of an unconsolidated financial institution resulting from a position in an index may be netted against a short position in the same index. Long and short positions in the same index without maturity dates are considered to have matching maturities.

(C) A short position in an index that is hedging a long cash or synthetic position in a national bank's or Federal savings association's own capital instrument or in a capital instrument of an unconsolidated financial institution can be decomposed to provide recognition of the hedge. More specifically, the portion of the index that is composed of the same underlying instrument that is being hedged may be used to offset the long position if both the long position being hedged and the short position in the index are reported as a trading asset or trading liability (whether on- or off-balance sheet) on the national bank's or Federal savings association's Call Report, and the hedge is deemed effective by the national bank's or Federal savings association's internal control processes, which have not been found to be inadequate by the OCC.

 $[78 \ \mathrm{FR} \ 62157, \, 62273, \, 62274, \, \mathrm{Oct.} \ 11, \, 2013]$

§§ 3.23-3.29 [Reserved]

Subpart D—Risk-Weighted Assets—Standardized Approach

SOURCE: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§ 3.30 Applicability.

- (a) This subpart sets forth methodologies for determining risk-weighted assets for purposes of the generally applicable risk-based capital requirements for all national banks or Federal savings associations.
- (b) Notwithstanding paragraph (a) of this section, a market risk national bank or Federal savings association must exclude from its calculation of risk-weighted assets under this subpart the risk-weighted asset amounts of all covered positions, as defined in subpart F of this part (except foreign exchange

positions that are not trading positions, OTC derivative positions, cleared transactions, and unsettled transactions).

RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

§ 3.31 Mechanics for calculating riskweighted assets for general credit risk.

- (a) General risk-weighting requirements. A national bank or Federal savings association must apply risk weights to its exposures as follows:
- (1) A national bank or Federal savings association must determine the exposure amount of each on-balance sheet exposure, each OTC derivative contract, and each off-balance sheet commitment, trade and transaction-related contingency, guarantee, repostyle transaction, financial standby letter of credit, forward agreement, or other similar transaction that is not:
- (i) An unsettled transaction subject to §3.38;
- (ii) A cleared transaction subject to §3.35;
- (iii) A default fund contribution subject to §3.35;
- (iv) A securitization exposure subject to \S 3.41 through 3.45; or
- (v) An equity exposure (other than an equity OTC derivative contract) subject to §§ 3.51 through 3.53.
- (2) The national bank or Federal savings association must multiply each exposure amount by the risk weight appropriate to the exposure based on the exposure type or counterparty, eligible guarantor, or financial collateral to determine the risk-weighted asset amount for each exposure.
- (b) Total risk-weighted assets for general credit risk equals the sum of the risk-weighted asset amounts calculated under this section.

§ 3.32 General risk weights.

- (a) Sovereign exposures—(1) Exposures to the U.S. government. (i) Notwithstanding any other requirement in this subpart, a national bank or Federal savings association must assign a zero percent risk weight to:
- (A) An exposure to the U.S. government, its central bank, or a U.S. government agency; and

- (B) The portion of an exposure that is directly and unconditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency. This includes a deposit or other exposure, or the portion of a deposit or other exposure, that is insured or otherwise unconditionally guaranteed by the FDIC or National Credit Union Administration.
- (ii) A national bank or Federal savings association must assign a 20 percent risk weight to the portion of an exposure that is conditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency. This includes an exposure, or the portion of an exposure, that is conditionally guaranteed by the FDIC or National Credit Union Administration.
- (2) Other sovereign exposures. In accordance with Table 1 to §3.32, a national bank or Federal savings association must assign a risk weight to a sovereign exposure based on the CRC applicable to the sovereign or the sovereign's OECD membership status if there is no CRC applicable to the sovereign

Table 1 to § 3.32—RISK Weights for Sovereign Exposures

	Risk weight (in percent)
CRC:	
0–1	0
2	20
3	50
4–6	100
7	150
OECD Member with No CRC	0
Non-OECD Member with No CRC	100
Sovereign Default	150

- (3) Certain sovereign exposures. Notwithstanding paragraph (a)(2) of this section, a national bank or Federal savings association may assign to a sovereign exposure a risk weight that is lower than the applicable risk weight in Table 1 to §3.32 if:
- (i) The exposure is denominated in the sovereign's currency;
- (ii) The national bank or Federal savings association has at least an equivalent amount of liabilities in that currency; and
- (iii) The risk weight is not lower than the risk weight that the home country supervisor allows national banks or Federal savings associations

under its jurisdiction to assign to the same exposures to the sovereign.

- (4) Exposures to a non-OECD member sovereign with no CRC. Except as provided in paragraphs (a)(3), (a)(5) and (a)(6) of this section, a national bank or Federal savings association must assign a 100 percent risk weight to an exposure to a sovereign if the sovereign does not have a CRC.
- (5) Exposures to an OECD member sovereign with no CRC. Except as provided in paragraph (a)(6) of this section, a national bank or Federal savings association must assign a 0 percent risk weight to an exposure to a sovereign that is a member of the OECD if the sovereign does not have a CRC.
- (6) Sovereign default. A national bank or Federal savings association must assign a 150 percent risk weight to a sovereign exposure immediately upon determining that an event of sovereign default has occurred, or if an event of sovereign default has occurred during the previous five years.
- (b) Certain supranational entities and multilateral development banks (MDBs). A national bank or Federal savings association must assign a zero percent risk weight to an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, or an MDB.
- (c) Exposures to GSEs. (1) A national bank or Federal savings association must assign a 20 percent risk weight to an exposure to a GSE other than an equity exposure or preferred stock.
- (2) A national bank or Federal savings association must assign a 100 percent risk weight to preferred stock issued by a GSE.
- (d) Exposures to depository institutions, foreign banks, and credit unions—(1) Exposures to U.S. depository institutions and credit unions. A national bank or Federal savings association must assign a 20 percent risk weight to an exposure to a depository institution or credit union that is organized under the laws of the United States or any state thereof, except as otherwise provided under paragraph (d)(3) of this section.
- (2) Exposures to foreign banks. (i) Except as otherwise provided under paragraphs (d)(2)(iv) and (d)(3) of this sec-

tion, a national bank or Federal savings association must assign a risk weight to an exposure to a foreign bank, in accordance with Table 2 to §3.32, based on the CRC that corresponds to the foreign bank's home country or the OECD membership status of the foreign bank's home country if there is no CRC applicable to the foreign bank's home country.

TABLE 2 TO § 3.32—RISK WEIGHTS FOR EXPOSURES TO FOREIGN BANKS

	Risk weight (in percent)
CRC:	
0–1	20
2	50
3	100
4–7	150
OECD Member with No CRC	20
Non-OECD Member with No CRC	100
Sovereign Default	150

- (ii) A national bank or Federal savings association must assign a 20 percent risk weight to an exposure to a foreign bank whose home country is a member of the OECD and does not have a CRC.
- (iii) A national bank or Federal savings association must assign a 100 percent risk weight to an exposure to a foreign bank whose home country is not a member of the OECD and does not have a CRC, with the exception of self-liquidating, trade-related contingent items that arise from the movement of goods, and that have a maturity of three months or less, which may be assigned a 20 percent risk weight.
- (iv) A national bank or Federal savings association must assign a 150 percent risk weight to an exposure to a foreign bank immediately upon determining that an event of sovereign default has occurred in the bank's home country, or if an event of sovereign default has occurred in the foreign bank's home country during the previous five years.
- (3) A national bank or Federal savings association must assign a 100 percent risk weight to an exposure to a financial institution if the exposure may be included in that financial institution's capital unless the exposure is:
- (i) An equity exposure;
- (ii) A significant investment in the capital of an unconsolidated financial

institution in the form of common stock pursuant to §3.22(d)(iii);

- (iii) Deducted from regulatory capital under §3.22; or
- (iv) Subject to a 150 percent risk weight under paragraph (d)(2)(iv) or Table 2 of paragraph (d)(2) of this section.
- (e) Exposures to public sector entities (PSEs)—(1) Exposures to U.S. PSEs. (i) A national bank or Federal savings association must assign a 20 percent risk weight to a general obligation exposure to a PSE that is organized under the laws of the United States or any state or political subdivision thereof.
- (ii) A national bank or Federal savings association must assign a 50 percent risk weight to a revenue obligation exposure to a PSE that is organized under the laws of the United States or any state or political subdivision thereof.
- (2) Exposures to foreign PSEs. (i) Except as provided in paragraphs (e)(1) and (e)(3) of this section, a national bank or Federal savings association must assign a risk weight to a general obligation exposure to a PSE, in accordance with Table 3 to §3.32, based on the CRC that corresponds to the PSE's home country or the OECD membership status of the PSE's home country if there is no CRC applicable to the PSE's home country.
- (ii) Except as provided in paragraphs (e)(1) and (e)(3) of this section, a national bank or Federal savings association must assign a risk weight to a revenue obligation exposure to a PSE, in accordance with Table 4 to §3.32, based on the CRC that corresponds to the PSE's home country; or the OECD membership status of the PSE's home country if there is no CRC applicable to the PSE's home country.
- (3) A national bank or Federal savings association may assign a lower risk weight than would otherwise apply under Tables 3 or 4 to §3.32 to an exposure to a foreign PSE if:
- (i) The PSE's home country supervisor allows banks under its jurisdiction to assign a lower risk weight to such exposures; and
- (ii) The risk weight is not lower than the risk weight that corresponds to the PSE's home country in accordance with Table 1 to §3.32.

TABLE 3 TO § 3.32—RISK WEIGHTS FOR NON-U.S. PSE GENERAL OBLIGATIONS

	Risk weight (in percent)
CRC:	
0–1	20
2	50
3	100
4–7	150
OECD Member with No CRC	20
Non-OECD Member with No CRC	100
Sovereign Default	150

TABLE 4 TO § 3.32—RISK WEIGHTS FOR NON-U.S. PSE REVENUE OBLIGATIONS

	Risk weight (in percent)
CRC:	
0–1	50
2–3	100
4–7	150
OECD Member with No CRC	50
Non-OECD Member with No CRC	100
Sovereign Default	150

- (4) Exposures to PSEs from an OECD member sovereign with no CRC. (i) A national bank or Federal savings association must assign a 20 percent risk weight to a general obligation exposure to a PSE whose home country is an OECD member sovereign with no CRC.
- (ii) A national bank or Federal savings association must assign a 50 percent risk weight to a revenue obligation exposure to a PSE whose home country is an OECD member sovereign with no CRC.
- (5) Exposures to PSEs whose home country is not an OECD member sovereign with no CRC. A national bank or Federal savings association must assign a 100 percent risk weight to an exposure to a PSE whose home country is not a member of the OECD and does not have a CRC.
- (6) A national bank or Federal savings association must assign a 150 percent risk weight to a PSE exposure immediately upon determining that an event of sovereign default has occurred in a PSE's home country or if an event of sovereign default has occurred in the PSE's home country during the previous five years.
- (f) Corporate exposures. A national bank or Federal savings association must assign a 100 percent risk weight to all its corporate exposures.

- (g) Residential mortgage exposures. (1) A national bank or Federal savings association must assign a 50 percent risk weight to a first-lien residential mortgage exposure that:
- (i) Is secured by a property that is either owner-occupied or rented;
- (ii) Is made in accordance with prudent underwriting standards, including standards relating to the loan amount as a percent of the appraised value of the property;
- (iii) Is not 90 days or more past due or carried in nonaccrual status; and
- (iv) Is not restructured or modified.
- (2) A national bank or Federal savings association must assign a 100 percent risk weight to a first-lien residential mortgage exposure that does not meet the criteria in paragraph (g)(1) of this section, and to junior-lien residential mortgage exposures.
- (3) For the purpose of this paragraph (g), if a national bank or Federal savings association holds the first-lien and junior-lien(s) residential mortgage exposures, and no other party holds an intervening lien, the national bank or Federal savings association must combine the exposures and treat them as a single first-lien residential mortgage exposure
- (4) A loan modified or restructured solely pursuant to the U.S. Treasury's Home Affordable Mortgage Program is not modified or restructured for purposes of this section.
- (h) Pre-sold construction loans. A national bank or Federal savings association must assign a 50 percent risk weight to a pre-sold construction loan unless the purchase contract is cancelled, in which case a national bank or Federal savings association must assign a 100 percent risk weight.
- (i) Statutory multifamily mortgages. A national bank or Federal savings association must assign a 50 percent risk weight to a statutory multifamily mortgage.
- (j) High-volatility commercial real estate (HVCRE) exposures. A national bank or Federal savings association must assign a 150 percent risk weight to an HVCRE exposure.
- (k) Past due exposures. Except for a sovereign exposure or a residential mortgage exposure, a national bank or Federal savings association must de-

termine a risk weight for an exposure that is 90 days or more past due or on nonaccrual according to the requirements set forth in this paragraph (k).

§ 3.32

- (1) A national bank or Federal savings association must assign a 150 percent risk weight to the portion of the exposure that is not guaranteed or that is unsecured.
- (2) A national bank or Federal savings association may assign a risk weight to the guaranteed portion of a past due exposure based on the risk weight that applies under §3.36 if the guarantee or credit derivative meets the requirements of that section.
- (3) A national bank or Federal savings association may assign a risk weight to the collateralized portion of a past due exposure based on the risk weight that applies under §3.37 if the collateral meets the requirements of that section.
- (1) Other assets. (1) A national bank or Federal savings association must assign a zero percent risk weight to cash owned and held in all offices of the national bank or Federal savings association or in transit; to gold bullion held in the national bank's or Federal savings association's own vaults or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities; and to exposures that arise from the settlement of cash transactions (such as equities, fixed income, spot foreign exchange and spot commodities) with a central counterparty where there is no assumption of ongoing counterparty credit risk by the central counterparty after settlement of the trade and associated default fund contributions.
- (2) A national bank or Federal savings association must assign a 20 percent risk weight to cash items in the process of collection.
- (3) A national bank or Federal savings association must assign a 100 percent risk weight to DTAs arising from temporary differences that the national bank or Federal savings association could realize through net operating loss carrybacks.
- (4) A national bank or Federal savings association must assign a 250 percent risk weight to the portion of each

63

of the following items that is not deducted from common equity tier 1 capital pursuant to §3.22(d):

- (i) MSAs; and
- (ii) DTAs arising from temporary differences that the national bank or Federal savings association could not realize through net operating loss carrybacks.
- (5) A national bank or Federal savings association must assign a 100 percent risk weight to all assets not specifically assigned a different risk weight under this subpart and that are not deducted from tier 1 or tier 2 capital pursuant to §3.22.
- (6) Notwithstanding the requirements of this section, a national bank or Federal savings association may assign an asset that is not included in one of the categories provided in this section to the risk weight category applicable under the capital rules applicable to bank holding companies and savings and loan holding companies at 12 CFR part 217, provided that all of the following conditions apply:
- (i) The national bank or Federal savings association is not authorized to hold the asset under applicable law other than debt previously contracted or similar authority; and
- (ii) The risks associated with the asset are substantially similar to the risks of assets that are otherwise assigned to a risk weight category of less than 100 percent under this subpart.

§ 3.33 Off-balance sheet exposures.

- (a) General. (1) A national bank or Federal savings association must calculate the exposure amount of an off-balance sheet exposure using the credit conversion factors (CCFs) in paragraph (b) of this section.
- (2) Where a national bank or Federal savings association commits to provide a commitment, the national bank or Federal savings association may apply the lower of the two applicable CCFs.
- (3) Where a national bank or Federal savings association provides a commitment structured as a syndication or participation, the national bank or Federal savings association is only required to calculate the exposure amount for its pro rata share of the commitment.

- (4) Where a national bank or Federal savings association provides a commitment, enters into a repurchase agreement, or provides a credit-enhancing representation and warranty, and such commitment, repurchase agreement, or credit-enhancing representation and warranty is not a securitization exposure, the exposure amount shall be no greater than the maximum contractual amount of the commitment, repurchase agreement, or credit-enhancing representation and warranty, as applicable.
- (b) Credit conversion factors—(1) Zero percent CCF. A national bank or Federal savings association must apply a zero percent CCF to the unused portion of a commitment that is unconditionally cancelable by the national bank or Federal savings association.
- (2) 20 percent CCF. A national bank or Federal savings association must apply a 20 percent CCF to the amount of:
- (i) Commitments with an original maturity of one year or less that are not unconditionally cancelable by the national bank or Federal savings association; and
- (ii) Self-liquidating, trade-related contingent items that arise from the movement of goods, with an original maturity of one year or less.
- (3) 50 percent CCF. A national bank or Federal savings association must apply a 50 percent CCF to the amount of:
- (i) Commitments with an original maturity of more than one year that are not unconditionally cancelable by the national bank or Federal savings association; and
- (ii) Transaction-related contingent items, including performance bonds, bid bonds, warranties, and performance standby letters of credit.
- (4) 100 percent CCF. A national bank or Federal savings association must apply a 100 percent CCF to the amount of the following off-balance-sheet items and other similar transactions:
 - (i) Guarantees:
- (ii) Repurchase agreements (the offbalance sheet component of which equals the sum of the current fair values of all positions the national bank or Federal savings association has sold subject to repurchase);

- Credit-enhancing representations and warranties that are not securitization exposures;
- (iv) Off-balance sheet securities lending transactions (the off-balance sheet component of which equals the sum of the current fair values of all positions the national bank or Federal savings association has lent under the transaction):
- (v) Off-balance sheet securities borrowing transactions (the off-balance sheet component of which equals the sum of the current fair values of all non-cash positions the national bank or Federal savings association has posted as collateral under the transaction);
- (vi) Financial standby letters of credit: and
 - (vii) Forward agreements.

§ 3.34 OTC derivative contracts.

- (a) Exposure amount—(1) Single OTC derivative contract. Except as modified by paragraph (b) of this section, the exposure amount for a single OTC derivative contract that is not subject to a qualifying master netting agreement is equal to the sum of the national bank's or Federal savings association's current credit exposure and potential future credit exposure (PFE) on the OTC derivative contract.
- (i) Current credit exposure. The current credit exposure for a single OTC derivative contract is the greater of

- the mark-to-fair value of the OTC derivative contract or zero.
- (ii) PFE. (A) The PFE for a single OTC derivative contract, including an OTC derivative contract with a negative mark-to-fair value, is calculated by multiplying the notional principal amount of the OTC derivative contract by the appropriate conversion factor in Table 1 to §3.34.
- (B) For purposes of calculating either the PFE under this paragraph (a) or the gross PFE under paragraph (a)(2) of this section for exchange rate contracts and other similar contracts in which the notional principal amount is equivalent to the cash flows, notional principal amount is the net receipts to each party falling due on each value date in each currency.
- (C) For an OTC derivative contract that does not fall within one of the specified categories in Table 1 to §3.34, the PFE must be calculated using the appropriate "other" conversion factor.
- (D) A national bank or Federal savings association must use an OTC derivative contract's effective notional principal amount (that is, the apparent or stated notional principal amount multiplied by any multiplier in the OTC derivative contract) rather than the apparent or stated notional principal amount in calculating PFE.
- (E) The PFE of the protection provider of a credit derivative is capped at the net present value of the amount of unpaid premiums.

TABLE 1 TO § 3.34—CONVERSION FACTOR MATRIX FOR DERIVATIVE CONTRACTS 1

Remaining maturity ²	Interest rate	Foreign exchange rate and gold	Credit (investment grade reference asset) ³	Credit (non-invest- ment-grade reference asset)	Equity	Precious metals (except gold)	Other
One year or less Greater than one year and less than or equal	0.00	0.01	0.05	0.10	0.06	0.07	0.10
to five years Greater than five years	0.005 0.015	0.05 0.075	0.05 0.05	0.10 0.10	0.08 0.10	0.07 0.08	0.12 0.15

¹ For a derivative contract with multiple exchanges of principal, the conversion factor is multiplied by the number of remaining

payments in the derivative contract.

For an OTC derivative contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the fair value of the contract is zero, the remaining maturity equals the time until the next reset date. For an interest rate derivative contract with a remaining maturity of greater than one year that meets these criteria, the minimum conversion factor is 0.005.

3 A national bank or Federal savings association must use the column labeled "Credit (investment-grade reference asset)" for

a credit derivative whose reference asset is an outstanding unsecured long-term debt security without credit enhancement that is investment grade. A national bank or Federal savings association must use the column labeled "Credit (non-investment-grade reference asset)" for all other credit derivatives.

- (2) Multiple OTC derivative contracts subject to a qualifying master netting agreement. Except as modified by paragraph (b) of this section, the exposure amount for multiple OTC derivative contracts subject to a qualifying master netting agreement is equal to the sum of the net current credit exposure and the adjusted sum of the PFE amounts for all OTC derivative contracts subject to the qualifying master netting agreement.
- (i) Net current credit exposure. The net current credit exposure is the greater of the net sum of all positive and negative mark-to-fair values of the individual OTC derivative contracts subject to the qualifying master netting agreement or zero.
- (ii) Adjusted sum of the PFE amounts. The adjusted sum of the PFE amounts, Anet, is calculated as Anet = $(0.4 \times \text{Agross}) + (0.6 \times \text{NGR} \times \text{Agross})$,

where:

- (A) Agross = the gross PFE (that is, the sum of the PFE amounts as determined under paragraph (a)(1)(ii) of this section for each individual derivative contract subject to the qualifying master netting agreement); and
- (B) Net-to-gross Ratio (NGR) = the ratio of the net current credit exposure to the gross current credit exposure. In calculating the NGR, the gross current credit exposure equals the sum of the positive current credit exposures (as determined under paragraph (a)(1)(i) of this section) of all individual derivative contracts subject to the qualifying master netting agreement.
- (b) Recognition of credit risk mitigation of collateralized OTC derivative contracts: (1) A national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures an OTC derivative contract or multiple OTC derivative contracts subject to a qualifying master netting agreement (netting set) by using the simple approach in §3.37(b).
- (2) As an alternative to the simple approach, a national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures such a contract or netting set if the financial collateral is marked-to-fair value on a daily basis and subject to a daily mar-

- gin maintenance requirement by applying a risk weight to the exposure as if it were uncollateralized and adjusting the exposure amount calculated under paragraph (a)(1) or (2) of this section using the collateral haircut approach in §3.37(c). The national bank or Federal savings association must substitute the exposure amount calculated under paragraph (a)(1) or (2) of this section for ΣE in the equation in §3.37(c)(2).
- (c) Counterparty credit risk for OTC credit derivatives. (1) Protection purchasers. A national bank or Federal savings association that purchases an OTC credit derivative that is recognized under §3.36 as a credit risk mitigant for an exposure that is not a covered position under subpart F is not required to compute a separate counterparty credit risk capital requirement under §3.32 provided that the national bank or Federal savings association does so consistently for all such credit derivatives. The national bank or Federal savings association must either include all or exclude all such credit derivatives that are subject to a qualifying master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for riskbased capital purposes.
- (2) Protection providers. (i) A national bank or Federal savings association that is the protection provider under an OTC credit derivative must treat the OTC credit derivative as an exposure to the underlying reference asset. The national bank or Federal savings association is not required to compute a counterparty credit risk capital requirement for the OTC credit derivative under §3.32, provided that this treatment is applied consistently for all such OTC credit derivatives. The national bank or Federal savings association must either include all or exclude all such OTC credit derivatives that are subject to a qualifying master netting agreement from any measure used to determine counterparty credit risk exposure.
- (ii) The provisions of this paragraph (c)(2) apply to all relevant counterparties for risk-based capital purposes unless the national bank or Federal savings association is treating the OTC

credit derivative as a covered position under subpart F, in which case the national bank or Federal savings association must compute a supplemental counterparty credit risk capital requirement under this section.

(d) Counterparty credit risk for OTC equity derivatives. (1) A national bank or Federal savings association must treat an OTC equity derivative contract as an equity exposure and compute a risk-weighted asset amount for the OTC equity derivative contract under §§3.51 through 3.53 (unless the national bank or Federal savings association is treating the contract as a covered position under subpart F of this part).

(2) In addition, the national bank or Federal savings association must also calculate a risk-based capital requirement for the counterparty credit risk of an OTC equity derivative contract under this section if the national bank or Federal savings association is treating the contract as a covered position under subpart F of this part.

(3) If the national bank or Federal savings association risk weights the contract under the Simple Risk-Weight Approach (SRWA) in §3.52, the national bank or Federal savings association may choose not to hold risk-based capital against the counterparty credit risk of the OTC equity derivative con-

tract, as long as it does so for all such contracts. Where the OTC equity derivative contracts are subject to a qualified master netting agreement, a national bank or Federal savings association using the SRWA must either include all or exclude all of the contracts from any measure used to determine counterparty credit risk exposure.

(e) Clearing member national bank's or Federal savings association's exposure amount. A clearing member national bank's or Federal savings association's exposure amount for an OTC derivative contract or netting set of OTC derivative contracts where the national bank or Federal savings association is either acting as a financial intermediary and enters into an offsetting transaction with a QCCP or where the national bank or Federal savings association provides a guarantee to the QCCP on the performance of the client equals the exposure amount calculated according to paragraph (a)(1) or (2) of this section multiplied by the scaling factor 0.71. If the national bank or Federal savings association determines that a longer period is appropriate, the national bank or Federal savings association must use a larger scaling factor to adjust for a longer holding period as follows:

Scaling factor = $\sqrt{\frac{H}{10}}$

where

H = the holding period greater than five days. Additionally, the OCC may require the national bank or Federal savings association to set a longer holding period if the OCC determines that a longer period is appropriate due to the nature, structure, or characteristics of the transaction or is commensurate with the risks associated with the transaction.

§ 3.35 Cleared transactions.

(a) General requirements—(1) Clearing member clients. A national bank or Federal savings association that is a clearing member client must use the methodologies described in paragraph (b) of

this section to calculate risk-weighted assets for a cleared transaction.

(2) Clearing members. A national bank or Federal savings association that is a clearing member must use the methodologies described in paragraph (c) of this section to calculate its risk-weighted assets for a cleared transaction and paragraph (d) of this section to calculate its risk-weighted assets for its default fund contribution to a CCP.

(b) Clearing member client national banks or Federal savings associations—(1) Risk-weighted assets for cleared transactions. (i) To determine the risk-weighted asset amount for a cleared transaction, a national bank or Federal

savings association that is a clearing member client must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (b)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (b)(3) of this section.

- (ii) A clearing member client national bank's or Federal savings association's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all its cleared transactions.
- (2) Trade exposure amount. (i) For a cleared transaction that is either a derivative contract or a netting set of derivative contracts, the trade exposure amount equals:
- (A) The exposure amount for the derivative contract or netting set of derivative contracts, calculated using the methodology used to calculate exposure amount for OTC derivative contracts under §3.34; plus
- (B) The fair value of the collateral posted by the clearing member client national bank or Federal savings association and held by the CCP, clearing member, or custodian in a manner that is not bankruptcy remote.
- (ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, the trade exposure amount equals:
- (A) The exposure amount for the repo-style transaction calculated using the methodologies under §3.37(c); plus
- (B) The fair value of the collateral posted by the clearing member client national bank or Federal savings association and held by the CCP, clearing member, or custodian in a manner that is not bankruptcy remote.
- (3) Cleared transaction risk weights. (i) For a cleared transaction with a QCCP, a clearing member client national bank or Federal savings association must apply a risk weight of:
- (A) 2 percent if the collateral posted by the national bank or Federal savings association to the QCCP or clearing member is subject to an arrangement that prevents any losses to the clearing member client national bank or Federal savings association due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and

any other clearing member clients of the clearing member; and the clearing member client national bank or Federal savings association has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from an event of default or from liquidation, insolvency, or receivership proceedings) the relevant court and administrative authorities would find the arrangements to be legal, valid, binding and enforceable under the law of the relevant jurisdictions; or

- (B) 4 percent if the requirements of 3.35(b)(3)(A) are not met.
- (ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member client national bank or Federal savings association must apply the risk weight appropriate for the CCP according to §3.32.
- (4) Collateral. (i) Notwithstanding any other requirements in this section, collateral posted by a clearing member client national bank or Federal savings association that is held by a custodian (in its capacity as custodian) in a manner that is bankruptcy remote from the CCP, the custodian, clearing member and other clearing member clients of the clearing member, is not subject to a capital requirement under this section.
- (ii) A clearing member client national bank or Federal savings association must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member, or custodian in connection with a cleared transaction in accordance with the requirements under §3.32.
- (c) Clearing member national banks or Federal savings associations—(1) Riskweighted assets for cleared transactions.
- (i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member national bank or Federal savings association must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (c)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (c)(3) of this section.

- (ii) A clearing member national bank's or Federal savings association's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.
- (2) Trade exposure amount. A clearing member national bank or Federal savings association must calculate its trade exposure amount for a cleared transaction as follows:
- (i) For a cleared transaction that is either a derivative contract or a netting set of derivative contracts, the trade exposure amount equals:
- (A) The exposure amount for the derivative contract, calculated using the methodology to calculate exposure amount for OTC derivative contracts under §3.34; plus
- (B) The fair value of the collateral posted by the clearing member national bank or Federal savings association and held by the CCP in a manner that is not bankruptcy remote.
- (ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals:
- (A) The exposure amount for repostyle transactions calculated using methodologies under §3.37(c); plus
- (B) The fair value of the collateral posted by the clearing member national bank or Federal savings association and held by the CCP in a manner that is not bankruptcy remote.
- (3) Cleared transaction risk weight. (i) A clearing member national bank or Federal savings association must apply a risk weight of 2 percent to the trade exposure amount for a cleared transaction with a QCCP.
- (ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member national bank or Federal savings association must apply the risk weight appropriate for the CCP according to §3.32.
- (4) Collateral. (i) Notwithstanding any other requirement in this section, collateral posted by a clearing member national bank or Federal savings asso-

- ciation that is held by a custodian in a manner that is bankruptcy remote from the CCP is not subject to a capital requirement under this section.
- (ii) A clearing member national bank or Federal savings association must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member, or a custodian in connection with a cleared transaction in accordance with requirements under § 3.32.
- (d) Default fund contributions. (1) General requirement. A clearing member national bank or Federal savings association must determine the risk-weighted asset amount for a default fund contribution to a CCP at least quarterly, or more frequently if, in the opinion of the national bank or Federal savings association or the OCC, there is a material change in the financial condition of the CCP.
- (2) Risk-weighted asset amount for default fund contributions to non-qualifying CCPs. A clearing member national bank's or Federal savings association's risk-weighted asset amount for default fund contributions to CCPs that are not QCCPs equals the sum of such default fund contributions multiplied by 1,250 percent, or an amount determined by the OCC, based on factors such as size, structure and membership characteristics of the CCP and riskiness of its transactions, in cases where such default fund contributions may be unlimited.
- (3) Risk-weighted asset amount for default fund contributions to QCCPs. A clearing member national bank's or Federal savings association's risk-weighted asset amount for default fund contributions to QCCPs equals the sum of its capital requirement, K_{CM} for each QCCP, as calculated under the methodology set forth in paragraphs (d)(3)(i) through (iii) of this section (Method 1), multiplied by 1,250 percent or in paragraphs (d)(3)(iv) of this section (Method 2)
- (i) Method 1. The hypothetical capital requirement of a QCCP (K_{CCP}) equals:

$$K_{CCP} = \sum_{clearing member i} \max_{i} (EBRM_{i} - VM_{i} - IM_{i} - DF_{i}; 0) \times RW \times 0.08$$

- (A) EBRM $_i$ = the exposure amount for each transaction cleared through the QCCP by clearing member i, calculated in accordance with §3.34 for OTC derivative contracts and §3.37(c)(2) for repostyle transactions, provided that:
- (1) For purposes of this section, in calculating the exposure amount the national bank or Federal savings association may replace the formula provided in $\S3.34(a)(2)(ii)$ with the following: Anet = $(0.15 \times \text{Agross}) + (0.85 \times \text{NGR} \times \text{Agross})$; and
- (2) For option derivative contracts that are cleared transactions, the PFE described in §3.34(a)(1)(ii) must be adjusted by multiplying the notional principal amount of the derivative contract by the appropriate conversion factor in Table 1 to §3.34 and the absolute value of the option's delta, that is, the ratio of the change in the value of the derivative contract to the corresponding change in the price of the underlying asset.
- (3) For repo-style transactions, when applying §3.37(c)(2), the national bank or Federal savings association must use the methodology in §3.37(c)(3);
- (B) VM_i = any collateral posted by clearing member i to the QCCP that it is entitled to receive from the QCCP,

but has not yet received, and any collateral that the QCCP has actually received from clearing member i;

- (C) IM_i = the collateral posted as initial margin by clearing member i to the QCCP;
- (D) DF_i = the funded portion of clearing member i's default fund contribution that will be applied to reduce the QCCP's loss upon a default by clearing member i;
- (E) RW = 20 percent, except when the OCC has determined that a higher risk weight is more appropriate based on the specific characteristics of the QCCP and its clearing members; and
- (F) Where a QCCP has provided its K_{CCP} , a national bank or Federal savings association must rely on such disclosed figure instead of calculating K_{CCP} under this paragraph (d), unless the national bank or Federal savings association determines that a more conservative figure is appropriate based on the nature, structure, or characteristics of the QCCP.
- (ii) For a national bank or Federal savings association that is a clearing member of a QCCP with a default fund supported by funded commitments, K_{CM} equals:

$$K_{CM_i} = \left(1 + \beta \cdot \frac{N}{N - 2}\right) \cdot \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

$$K_{CM}^{*} = \begin{cases} c_{2} \cdot \mu \cdot \left(K_{CCP} - DF^{'}\right) + c_{2} \cdot DF_{CM}^{'} & if & DF^{'} < K_{CCP} & (i) \\ c_{2} \cdot \left(K_{CCP} - DF_{CCP}\right) + c_{1} \cdot \left(DF^{'} - K_{CCP}\right) & if & DF_{CCP} < K_{CCP} \leq DF^{'} & (ii) \\ c_{1} \cdot DF_{CM}^{'} & if & K_{CCP} \leq DF_{CCP} & (iii) \end{cases}$$

Where

(A)
$$\beta = \frac{A_{Net,1} + A_{Net,2}}{\sum_{i} A_{Net,i}}$$

Subscripts 1 and 2 denote the clearing members with the two largest $A_{\rm Net}$ values. For purposes of this paragraph (d), for derivatives $A_{\rm Net}$ is defined in

 $\S 3.34(a)(2)(ii)$ and for repo-style transactions, A_{Net} means the exposure amount as defined in $\S 3.37(c)(2)$ using the methodology in $\S 3.37(c)(3)$;

- (B) N = the number of clearing members in the QCCP;
- (C) DF_{CCP} = the QCCP's own funds and other financial resources that would be used to cover its losses before clearing members' default fund contributions are used to cover losses;
- (D) DF_{CM} = funded default fund contributions from all clearing members and any other clearing member contributed financial resources that are available to absorb mutualized QCCP losses:
- (E) $DF = DF_{CCP} + DF_{CM}$ (that is, the total funded default fund contribution);
- (F) $\overline{DF_i}$ = average $\overline{DF_i}$ = the average funded default fund contribution from an individual clearing member;
 - (G) $DF'_{CM} = DF_{CM} 2 \cdot \overline{DF_i} = \sum_i DF_i 2 \cdot \overline{DF_i}$ (that is, the funded default fund contribution

from surviving clearing members assuming that two average clearing members have defaulted and their default fund contributions and initial margins have been used to absorb the resulting losses);

(H)
$$DF' = DF_{CCP} + DF_{CM} = DF - 2 \cdot \overline{DF_i}$$

(that is, the total funded default fund contributions from the QCCP and the surviving clearing members that are available to mutualize losses, assuming that two average clearing members have defaulted);

(I)
$$c_1 = Max \left\{ \frac{1.6\%}{(DF'/K_{CCP})^{0.3}}; 0.16\% \right\}$$

(that is, a decreasing capital factor, between 1.6 percent and 0.16 percent, applied to the excess funded default funds provided by clearing members);

(J) $c_2 = 100$ percent; and

(K)
$$\mu$$
= 1.2;

(iii) (A) For a [BANK] that is a clearing member of a QCCP with a default fund supported by unfunded commitments, K_{CM} equals:

$$K_{CM_i} = \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

Where:

(1) DF_i = the national bank's or Federal savings association's unfunded commitment to the default fund:

(2) $\mathrm{DF}_{\mathrm{CM}}$ = the total of all clearing members' unfunded commitment to the default fund; and

(3) K^*_{CM} as defined in paragraph (d)(3)(ii) of this section.

(B) For a national bank or Federal savings association that is a clearing member of a QCCP with a default fund supported by unfunded commitments and is unable to calculate K_{CM} using the methodology described in paragraph (d)(3)(iii) of this section, K_{CM} equals:

$$K_{CM_i} = \frac{IM_i}{IM_{CM}} \cdot K_{CM}^*$$

Where:

(1) IM_i = the national bank's or Federal savings association's initial margin posted to the QCCP;

(2) IM_{CM} = the total of initial margin posted to the QCCP; and

 $(3)K^*_{CM}$ as defined in paragraph (d)(3)(ii) of this section.

(iv) *Method 2*. A clearing member national bank's or Federal savings association's risk-weighted asset amount for its default fund contribution to a QCCP, RWA_{DF}, equals:

 $RWA_{DF} = Min \{12.5 * DF; 0.18 * TE\}$

Where.

(A) TE = the national bank's or Federal savings association's trade exposure amount to the QCCP, calculated according to section 35(c)(2);

(B) DF = the funded portion of the national bank's or Federal savings association's default fund contribution to the QCCP.

(4) Total risk-weighted assets for default fund contributions. Total risk-weighted assets for default fund contributions is the sum of a clearing member national bank's or Federal savings association's risk-weighted assets for all of its default fund contributions to all CCPs of which the national bank or Federal savings association is a clearing member.

§ 3.36 Guarantees and credit derivatives: substitution treatment.

(a) Scope—(1) General. A national bank or Federal savings association may recognize the credit risk mitigation benefits of an eligible guarantee or eligible credit derivative by sub-

stituting the risk weight associated with the protection provider for the risk weight assigned to an exposure, as provided under this section.

(2) This section applies to exposures for which:

(i) Credit risk is fully covered by an eligible guarantee or eligible credit derivative: or

(ii) Credit risk is covered on a pro rata basis (that is, on a basis in which the national bank or Federal savings association and the protection provider share losses proportionately) by an eligible guarantee or eligible credit derivative.

(3) Exposures on which there is a tranching of credit risk (reflecting at least two different levels of seniority) generally are securitization exposures subject to §§ 3.41 through 3.45.

(4) If multiple eligible guarantees or eligible credit derivatives cover a single exposure described in this section, a national bank or Federal savings association may treat the hedged exposure as multiple separate exposures each covered by a single eligible guarantee or eligible credit derivative and may calculate a separate risk-weighted asset amount for each separate exposure as described in paragraph (c) of this section.

(5) If a single eligible guarantee or eligible credit derivative covers multiple hedged exposures described in paragraph (a)(2) of this section, a national bank or Federal savings association must treat each hedged exposure as covered by a separate eligible guarantee or eligible credit derivative and

must calculate a separate risk-weighted asset amount for each exposure as described in paragraph (c) of this section

- (b) Rules of recognition. (1) A national bank or Federal savings association may only recognize the credit risk mitigation benefits of eligible guarantees and eligible credit derivatives.
- (2) A national bank or Federal savings association may only recognize the credit risk mitigation benefits of an eligible credit derivative to hedge an exposure that is different from the credit derivative's reference exposure used for determining the derivative's cash settlement value, deliverable obligation, or occurrence of a credit event if:
- (i) The reference exposure ranks *pari* passu with, or is subordinated to, the hedged exposure; and
- (ii) The reference exposure and the hedged exposure are to the same legal entity, and legally enforceable cross-default or cross-acceleration clauses are in place to ensure payments under the credit derivative are triggered when the obligated party of the hedged exposure fails to pay under the terms of the hedged exposure.
- (c) Substitution approach—(1) Full coverage. If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the exposure amount of the hedged exposure, a national bank or Federal savings association may recognize the guarantee or credit derivative in determining the risk-weighted asset amount for hedged exposure by substituting the risk weight applicable to the guarantor or credit derivative protection provider under §3.32 for the risk weight assigned to the exposure.
- (2) Partial coverage. If an eligible guarantee or eligible credit derivative meets the conditions in §§3.36(a) and 3.37(b) and the protection amount (P) of the guarantee or credit derivative is less than the exposure amount of the hedged exposure, the national bank or Federal savings association must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk

mitigation benefit of the guarantee or credit derivative.

- (i) The national bank or Federal savings association may calculate the risk-weighted asset amount for the protected exposure under §3.32, where the applicable risk weight is the risk weight applicable to the guarantor or credit derivative protection provider.
- (ii) The national bank or Federal savings association must calculate the risk-weighted asset amount for the unprotected exposure under §3.32, where the applicable risk weight is that of the unprotected portion of the hedged exposure.
- (iii) The treatment provided in this section is applicable when the credit risk of an exposure is covered on a partial pro rata basis and may be applicable when an adjustment is made to the effective notional amount of the guarantee or credit derivative under paragraphs (d), (e), or (f) of this section.
- (d) Maturity mismatch adjustment. (1) A national bank or Federal savings association that recognizes an eligible guarantee or eligible credit derivative in determining the risk-weighted asset amount for a hedged exposure must adjust the effective notional amount of the credit risk mitigant to reflect any maturity mismatch between the hedged exposure and the credit risk mitigant.
- (2) A maturity mismatch occurs when the residual maturity of a credit risk mitigant is less than that of the hedged exposure(s).
- (3) The residual maturity of a hedged exposure is the longest possible remaining time before the obligated party of the hedged exposure is scheduled to fulfil its obligation on the hedged exposure. If a credit risk mitigant has embedded options that may reduce its term, the national bank or Federal savings association (protection purchaser) must use the shortest possible residual maturity for the credit risk mitigant. If a call is at the discretion of the protection provider, the residual maturity of the credit risk mitigant is at the first call date. If the call is at the discretion of the national bank or Federal savings association (protection purchaser), but the terms of the arrangement at origination of

the credit risk mitigant contain a positive incentive for the national bank or Federal savings association to call the transaction before contractual maturity, the remaining time to the first call date is the residual maturity of the credit risk mitigant.

- (4) A credit risk mitigant with a maturity mismatch may be recognized only if its original maturity is greater than or equal to one year and its residual maturity is greater than three months.
- (5) When a maturity mismatch exists, the national bank or Federal savings association must apply the following adjustment to reduce the effective notional amount of the credit risk mitigant: $Pm = E \times (t 0.25) / (T 0.25)$, where:
- (i) Pm = effective notional amount of the credit risk mitigant, adjusted for maturity mismatch;
- (ii) E = effective notional amount of the credit risk mitigant;
- (iii) t = the lesser of T or the residual maturity of the credit risk mitigant, expressed in years; and
- (iv) T = the lesser of five or the residual maturity of the hedged exposure, expressed in years.
- (e) Adjustment for credit derivatives without restructuring as a credit event. If a national bank or Federal savings association recognizes an eligible credit derivative that does not include as a credit event a restructuring of the hedged exposure involving forgiveness or postponement of principal, interest, or fees that results in a credit loss event (that is, a charge-off, specific provision, or other similar debit to the profit and loss account), the national bank or Federal savings association must apply the following adjustment to reduce the effective notional amount of the credit derivative: Pr = $Pm \times 0.60$, where:
- (1) Pr = effective notional amount of the credit risk mitigant, adjusted for

lack of restructuring event (and maturity mismatch, if applicable); and

- (2) Pm = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch, if applicable).
- (f) Currency mismatch adjustment. (1) If a national bank or Federal savings association recognizes an eligible guarantee or eligible credit derivative that is denominated in a currency different from that in which the hedged exposure is denominated, the national bank or Federal savings association must apply the following formula to the effective notional amount of the guarantee or credit derivative: $Pc = Pr \times (1-H_{FX})$, where:
- (i) Pc = effective notional amount of the credit risk mitigant, adjusted for currency mismatch (and maturity mismatch and lack of restructuring event, if applicable):
- (ii) Pr = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch and lack of restructuring event, if applicable); and
- (iii) H_{FX} = haircut appropriate for the currency mismatch between the credit risk mitigant and the hedged exposure.
- (2) A national bank or Federal savings association must set $H_{\rm FX}$ equal to eight percent unless it qualifies for the use of and uses its own internal estimates of foreign exchange volatility based on a ten-business-day holding period. A national bank or Federal savings association qualifies for the use of its own internal estimates of foreign exchange volatility if it qualifies for the use of its own-estimates haircuts in $\S 3.37(c)(4)$.
- (3) A national bank or Federal savings association must adjust $H_{\rm FX}$ calculated in paragraph (f)(2) of this section upward if the national bank or Federal savings association revalues the guarantee or credit derivative less frequently than once every 10 business days using the following square root of time formula:

$$H_{FX} = 8\% \sqrt{\frac{T_M}{10}}$$
, where T_M equals the greater of 10 or the number of days between

revaluation.

§3.37 Collateralized transactions.

- (a) General. (1) To recognize the risk-mitigating effects of financial collateral, a national bank or Federal savings association may use:
- (i) The simple approach in paragraph (b) of this section for any exposure; or
- (ii) The collateral haircut approach in paragraph (c) of this section for repo-style transactions, eligible margin loans, collateralized derivative contracts, and single-product netting sets of such transactions.
- (2) A national bank or Federal savings association may use any approach described in this section that is valid for a particular type of exposure or transaction; however, it must use the same approach for similar exposures or transactions.
- (b) The simple approach—(1) General requirements. (i) A national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures any exposure.
- (ii) To qualify for the simple approach, the financial collateral must meet the following requirements:
- (A) The collateral must be subject to a collateral agreement for at least the life of the exposure;
- (B) The collateral must be revalued at least every six months; and
- (C) The collateral (other than gold) and the exposure must be denominated in the same currency.
- (2) Risk weight substitution. (i) A national bank or Federal savings association may apply a risk weight to the portion of an exposure that is secured by the fair value of financial collateral (that meets the requirements of paragraph (b)(1) of this section) based on the risk weight assigned to the collateral under §3.32. For repurchase agreements, reverse repurchase agreements, and securities lending and borrowing transactions, the collateral is the instruments, gold, and cash the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction. Except as provided in paragraph (b)(3) of this section, the risk weight assigned to the collateralized portion of the exposure may not be less than 20 percent.

- (ii) A national bank or Federal savings association must apply a risk weight to the unsecured portion of the exposure based on the risk weight applicable to the exposure under this subpart.
- (3) Exceptions to the 20 percent risk-weight floor and other requirements. Not-withstanding paragraph (b)(2)(i) of this section:
- (i) A national bank or Federal savings association may assign a zero percent risk weight to an exposure to an OTC derivative contract that is marked-to-market on a daily basis and subject to a daily margin maintenance requirement, to the extent the contract is collateralized by cash on deposit.
- (ii) A national bank or Federal savings association may assign a 10 percent risk weight to an exposure to an OTC derivative contract that is marked-to-market daily and subject to a daily margin maintenance requirement, to the extent that the contract is collateralized by an exposure to a sovereign that qualifies for a zero percent risk weight under § 3.32.
- (iii) A national bank or Federal savings association may assign a zero percent risk weight to the collateralized portion of an exposure where:
- (A) The financial collateral is cash on deposit; or
- (B) The financial collateral is an exposure to a sovereign that qualifies for a zero percent risk weight under §3.32, and the national bank or Federal savings association has discounted the fair value of the collateral by 20 percent.
- (c) Collateral haircut approach—(1) General. A national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures an eligible margin loan, repo-style transaction, collateralized derivative contract, or single-product netting set of such transactions, and of any collateral that secures a repo-style transaction that is included in the national bank's or Federal savings association's VaR-based measure under subpart F of this part by using the collateral haircut approach in this section. A national bank or Federal savings association may use the standard supervisory haircuts in paragraph (c)(3) of this section or, with

prior written approval of the OCC, its own estimates of haircuts according to paragraph (c)(4) of this section.

- (2) Exposure amount equation. A national bank or Federal savings association must determine the exposure amount for an eligible margin loan, repo-style transaction, collateralized derivative contract, or a single-product netting set of such transactions by setting the exposure amount equal to max $\{0, [(\Sigma E \Sigma C) + \Sigma (Es \times Hs) + \Sigma (Efx \times Hfx)]\}$, where:
- (i)(A) For eligible margin loans and repo-style transactions and netting sets thereof, ΣE equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty under the transaction (or netting set)); and
- (B) For collateralized derivative contracts and netting sets thereof, ΣE equals the exposure amount of the OTC derivative contract (or netting set) calculated under §3.34 (a)(1) or (2).
- (ii) ΣC equals the value of the collateral (the sum of the current fair values of all instruments, gold and cash the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction (or netting set));
- (iii) Es equals the absolute value of the net position in a given instrument or in gold (where the net position in the instrument or gold equals the sum of the current fair values of the instrument or gold the national bank or Fed-

eral savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of that same instrument or gold the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty);

- (iv) Hs equals the market price volatility haircut appropriate to the instrument or gold referenced in Es;
- (v) Efx equals the absolute value of the net position of instruments and cash in a currency that is different from the settlement currency (where the net position in a given currency equals the sum of the current fair values of any instruments or cash in the currency the national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of any instruments or cash in the currency the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty); and
- (vi) Hfx equals the haircut appropriate to the mismatch between the currency referenced in Efx and the settlement currency.
- (3) Standard supervisory haircuts. (i) A national bank or Federal savings association must use the haircuts for market price volatility (Hs) provided in Table 1 to §3.37, as adjusted in certain circumstances in accordance with the requirements of paragraphs (c)(3)(iii) and (iv) of this section.

TABLE 1 TO § 3.37—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS 1

		Investment					
Residual maturity	wei	reign issuers ght under §3 (in percent) ²		Non-sovereign issuers risk weight under § 3.32 (in percent)			grade securitization exposures
	Zero	20 or 50	100	20	50	100	(in percent)
Less than or equal to 1 year	0.5	1.0	15.0	1.0	2.0	4.0	4.0
equal to 5 years	2.0	3.0	15.0	4.0	6.0	8.0	12.0
Greater than 5 years	4.0	6.0	15.0	8.0	12.0	16.0	24.0
Main index equities (including convertible bonds) and gold						15.0	
Other publicly traded equities (including convertible bonds)				25.0			
Mutual funds			Highest ha		able to any so d can invest.	ecurity in which	

TABLE 1 TO § 3.37—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS 1—Continued

		Haircut (in percent) assigned based on:					Investment
Residual maturity	Sove	Sovereign issuers risk weight under § 3.32 (in percent) ²			Non-sovereign issuers risk weight under § 3.32 (in percent)		
	Zero	20 or 50	100	20	50	100	(in percent)
Cash collateral held			Zero.				
Other exposure types					25.0		

¹ The market price volatility haircuts in Table 1 to §3.37 are based on a 10 business-day holding period. ² Includes a foreign PSE that receives a zero percent risk weight.

(ii) For currency mismatches, a national bank or Federal savings association must use a haircut for foreign exchange rate volatility (Hfx) of 8.0 percent, as adjusted in certain circumstances under paragraphs (c)(3)(iii) and (iv) of this section.

(iii) For repo-style transactions, a national bank or Federal savings association may multiply the standard supervisory haircuts provided in paragraphs (c)(3)(i) and (ii) of this section by the square root of ½ (which equals 0.707107).

(iv) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a national bank or Federal savings association must adjust the supervisory haircuts provided in paragraphs (c)(3)(i) and (ii) of this section upward on the basis of a holding period of twenty business days for the following quarter except in the calcula-

tion of the exposure amount for purposes of §3.35. If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a national bank or Federal savings association must adjust the supervisory haircuts upward on the basis of a holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the national bank or Federal savings association must adjust the supervisory haircuts upward for that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set. A national bank or Federal savings association must adjust the standard supervisory haircuts upward using the following formula:

$$H_A = H_S \sqrt{\frac{T_M}{T_S}}$$
, where

(A) T_M equals a holding period of longer than 10 business days for eligible margin loans and derivative contracts or longer than 5 business days for repo-style transactions;

(B) H_S equals the standard supervisory haircut; and

(C) Ts equals 10 business days for eligible margin loans and derivative contracts or 5 business days for repo-style transactions.

(v) If the instrument a national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral does not meet the definition

of financial collateral, the national bank or Federal savings association must use a 25.0 percent haircut for market price volatility (H_s).

(4) Own internal estimates for haircuts. With the prior written approval of the OCC, a national bank or Federal savings association may calculate haircuts (Hs and Hfx) using its own internal estimates of the volatilities of market prices and foreign exchange rates:

(i) To receive OCC approval to use its own internal estimates, a national bank or Federal savings association

must satisfy the following minimum standards:

- (A) A national bank or Federal savings association must use a 99th percentile one-tailed confidence interval.
- (B) The minimum holding period for a repo-style transaction is five business days and for an eligible margin loan is ten business days except for transactions or netting sets for which para-

graph (c)(4)(i)(C) of this section applies. When a national bank or Federal savings association calculates an own-estimates haircut on a T_N -day holding period, which is different from the minimum holding period for the transaction type, the applicable haircut (H_M) is calculated using the following square root of time formula:

$$H_M = H_N \sqrt{\frac{T_M}{T_N}}$$
, where

- (1) T_M equals 5 for repo-style transactions and 10 for eligible margin loans:
- (2) T_N equals the holding period used by the national bank or Federal savings association to derive H_N ; and
- (3) H_{N} equals the haircut based on the holding period $T_{\text{N}.}$
- (C) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a national bank or Federal savings association must calculate the haircut using a minimum holding period of twenty business days for the following quarter except in the calculation of the exposure amount for purposes of §3.35. If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a national bank or Federal savings association must calculate the haircut using a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the national bank or Federal savings association must calculate the haircut for transactions in that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set.
- (D) A national bank or Federal savings association is required to calculate its own internal estimates with inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the security or category of securities.

- (E) A national bank or Federal savings association must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the national bank's or Federal savings association's own internal estimates for haircuts under this section and must be able to provide empirical support for the period used. The national bank or Federal savings association must obtain the prior approval of the OCC for, and notify the OCC if the national bank or Federal savings association makes any material changes to, these policies and procedures.
- (F) Nothing in this section prevents the OCC from requiring a national bank or Federal savings association to use a different period of significant financial stress in the calculation of own internal estimates for haircuts.
- (G) A national bank or Federal savings association must update its data sets and calculate haircuts no less frequently than quarterly and must also reassess data sets and haircuts whenever market prices change materially.
- (ii) With respect to debt securities that are investment grade, a national bank or Federal savings association may calculate haircuts for categories of securities. For a category of securities, the national bank or Federal savings association must calculate the haircut on the basis of internal volatility estimates for securities in that category that are representative of the

securities in that category that the national bank or Federal savings association has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. In determining relevant categories, the national bank or Federal savings association must at a minimum take into account:

- (A) The type of issuer of the security;
- (B) The credit quality of the security;
- (C) The maturity of the security; and
- (D) The interest rate sensitivity of the security.
- (iii) With respect to debt securities that are not investment grade and equity securities, a national bank or Federal savings association must calculate a separate haircut for each individual security.
- (iv) Where an exposure or collateral (whether in the form of cash or securities) is denominated in a currency that differs from the settlement currency, the national bank or Federal savings association must calculate a separate currency mismatch haircut for its net position in each mismatched currency based on estimated volatilities of foreign exchange rates between the mismatched currency and the settlement currency.
- (v) A national bank's or Federal savings association's own estimates of market price and foreign exchange rate volatilities may not take into account the correlations among securities and foreign exchange rates on either the exposure or collateral side of a transaction (or netting set) or the correlations among securities and foreign exchange rates between the exposure and collateral sides of the transaction (or netting set).

RISK-WEIGHTED ASSETS FOR UNSETTLED TRANSACTIONS

§ 3.38 Unsettled transactions.

- (a) Definitions. For purposes of this section:
- (1) Delivery-versus-payment (DvP) transaction means a securities or commodities transaction in which the buyer is obligated to make payment only if the seller has made delivery of the securities or commodities and the seller is obligated to deliver the securi-

ties or commodities only if the buyer has made payment.

- (2) Payment-versus-payment (PvP) transaction means a foreign exchange transaction in which each counterparty is obligated to make a final transfer of one or more currencies only if the other counterparty has made a final transfer of one or more currencies.
- (3) A transaction has a normal settlement period if the contractual settlement period for the transaction is equal to or less than the market standard for the instrument underlying the transaction and equal to or less than five business days.
- (4) Positive current exposure of a national bank or Federal savings association for a transaction is the difference between the transaction value at the agreed settlement price and the current market price of the transaction, if the difference results in a credit exposure of the national bank or Federal savings association to the counterparty.
- (b) *Scope*. This section applies to all transactions involving securities, foreign exchange instruments, and commodities that have a risk of delayed settlement or delivery. This section does not apply to:
- (1) Cleared transactions that are marked-to-market daily and subject to daily receipt and payment of variation margin;
- (2) Repo-style transactions, including unsettled repo-style transactions;
- (3) One-way cash payments on OTC derivative contracts; or
- (4) Transactions with a contractual settlement period that is longer than the normal settlement period (which are treated as OTC derivative contracts as provided in §3.34).
- (c) System-wide failures. In the case of a system-wide failure of a settlement, clearing system or central counterparty, the OCC may waive risk-based capital requirements for unsettled and failed transactions until the situation is rectified.
- (d) Delivery-versus-payment (DvP) and payment-versus-payment (PvP) transactions. A national bank or Federal savings association must hold risk-based capital against any DvP or PvP transaction with a normal settlement

§§ 3.39-3.40

period if the national bank's or Federal savings association's counterparty has not made delivery or payment within five business days after the settlement date. The national bank or Federal savings association must determine its risk-weighted asset amount for such a transaction by multiplying the positive current exposure of the transaction for the national bank or Federal savings association by the appropriate risk weight in Table 1 to §3.38.

TABLE 1 TO § 3.38—RISK WEIGHTS FOR UNSETTLED DVP AND PVP TRANSACTIONS

Number of business days after contractual settlement date	Risk weight to be applied to positive current exposure (in percent)	
From 5 to 15	100.0 625.0 937.5 1,250.0	

- (e) Non-DvP/non-PvP (non-deliveryversus-payment/non-payment-versus-payment) transactions. (1) A national bank or Federal savings association must hold risk-based capital against any non-DvP/non-PvP transaction with a normal settlement period if the national bank or Federal savings association has delivered cash, securities, commodities, or currencies to its counterparty but has not received its corresponding deliverables by the end of the same business day. The national bank or Federal savings association must continue to hold risk-based capital against the transaction until the national bank or Federal savings association has received its corresponding deliverables.
- (2) From the business day after the national bank or Federal savings association has made its delivery until five business days after the counterparty delivery is due, the national bank or Federal savings association must calculate the risk-weighted asset amount for the transaction by treating the current fair value of the deliverables owed to the national bank or Federal savings association as an exposure to the counterparty and using the applicable counterparty risk weight under §3.32.
- (3) If the national bank or Federal savings association has not received its deliverables by the fifth business day

after counterparty delivery was due, the national bank or Federal savings association must assign a 1,250 percent risk weight to the current fair value of the deliverables owed to the national bank or Federal savings association.

(f) Total risk-weighted assets for unsettled transactions. Total risk-weighted assets for unsettled transactions is the sum of the risk-weighted asset amounts of all DvP, PvP, and non-DvP/non-PvP transactions.

§§ 3.39-3.40 [Reserved]

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

§ 3.41 Operational requirements for securitization exposures.

- (a) Operational criteria for traditional securitizations. A national bank or Federal savings association that transfers exposures it has originated or purchased to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of its risk-weighted assets only if each condition in this section is satisfied. A national bank or Federal savings association that meets these conditions must hold risk-based capital against any credit risk it retains in connection with the securitization. A national bank or Federal savings association that fails to meet these conditions must hold risk-based capital against the transferred exposures as if they had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the transaction. The conditions are:
- (1) The exposures are not reported on the national bank's or Federal savings association's consolidated balance sheet under GAAP:
- (2) The national bank or Federal savings association has transferred to one or more third parties credit risk associated with the underlying exposures;
- (3) Any clean-up calls relating to the securitization are eligible clean-up calls; and
- (4) The securitization does not:
- (i) Include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit: and

- (ii) Contain an early amortization provision.
- (b) Operational criteria for synthetic securitizations. For synthetic securitizations, a national bank or Federal savings association may recognize for risk-based capital purposes the use of a credit risk mitigant to hedge underlying exposures only if each condition in this paragraph (b) is satisfied. A national bank or Federal savings association that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the synthetic securitization. A national bank or Federal savings association that fails to meet these conditions or chooses not to recognize the credit risk mitigant for purposes of this section must instead hold risk-based capital against the underlying exposures as if they had not been synthetically securitized. The conditions are:
 - (1) The credit risk mitigant is:
 - (i) Financial collateral;
- (ii) A guarantee that meets all criteria as set forth in the definition of "eligible guarantee" in §3.2, except for the criteria in paragraph (3) of that definition; or
- (iii) A credit derivative that meets all criteria as set forth in the definition of "eligible credit derivative" in §3.2, except for the criteria in paragraph (3) of the definition of "eligible guarantee" in §3.2.
- (2) The national bank or Federal savings association transfers credit risk associated with the underlying exposures to one or more third parties, and the terms and conditions in the credit risk mitigants employed do not include provisions that:
- (i) Allow for the termination of the credit protection due to deterioration in the credit quality of the underlying exposures:
- (ii) Require the national bank or Federal savings association to alter or replace the underlying exposures to improve the credit quality of the underlying exposures;
- (iii) Increase the national bank's or Federal savings association's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;

- (iv) Increase the yield payable to parties other than the national bank or Federal savings association in response to a deterioration in the credit quality of the underlying exposures; or
- (v) Provide for increases in a retained first loss position or credit enhancement provided by the national bank or Federal savings association after the inception of the securitization;
- (3) The national bank or Federal savings association obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions; and
- (4) Any clean-up calls relating to the securitization are eligible clean-up calls.
- (c) Due diligence requirements for securitization exposures. (1) Except for exposures that are deducted from common equity tier 1 capital and exposures subject to §3.42(h), if a national bank or Federal savings association is unable to demonstrate to the satisfaction of the OCC a comprehensive understanding of the features securitization exposure that would materially affect the performance of the exposure, the national bank or Federal savings association must assign the securitization exposure a risk weight of 1,250 percent. The national bank's or Federal savings association's analysis must be commensurate with the complexity of the securitization exposure and the materiality of the exposure in relation to its capital.
- (2) A national bank or Federal savings association must demonstrate its comprehensive understanding of a securitization exposure under paragraph (c)(1) of this section, for each securitization exposure by:
- (i) Conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure, and documenting such analysis within three business days after acquiring the exposure, considering:
- (A) Structural features of the securitization that would materially impact the performance of the exposure, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the

performance of organizations that service the exposure, and deal-specific definitions of default;

- (B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average LTV ratio; and industry and geographic diversification data on the underlying exposure(s);
- (C) Relevant market data of the securitization, for example, bid-ask spread, most recent sales price and historic price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and
- (D) For resecuritization exposures, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and
- (ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under paragraph (c)(1) of this section for each securitization exposure.

§ 3.42 Risk-weighted assets for securitization exposures.

- (a) Securitization risk weight approaches. Except as provided elsewhere in this section or in §3.41:
- (1) A national bank or Federal savings association must deduct from common equity tier 1 capital any aftertax gain-on-sale resulting from a securitization and apply a 1,250 percent risk weight to the portion of a CEIO that does not constitute after-tax gain-on-sale.
- (2) If a securitization exposure does not require deduction under paragraph (a)(1) of this section, a national bank or Federal savings association may assign a risk weight to the securitization exposure using the simplified supervisory formula approach (SSFA) in accordance with §§3.43(a) through 3.43(d) and subject to the limitation under paragraph (e) of this section. Alternatively, a national bank or Federal

savings association that is not subject to subpart F of this part may assign a risk weight to the securitization exposure using the gross-up approach in accordance with §3.43(e), provided, however, that such national bank or Federal savings association must apply either the SSFA or the gross-up approach consistently across all of its securitization exposures, except as provided in paragraphs (a)(1), (a)(3), and (a)(4) of this section.

- (3) If a securitization exposure does not require deduction under paragraph (a)(1) of this section and the national bank or Federal savings association cannot, or chooses not to apply the SSFA or the gross-up approach to the exposure, the national bank or Federal savings association must assign a risk weight to the exposure as described in §3.44.
- (4) If a securitization exposure is a derivative contract (other than protection provided by a national bank or Federal savings association in the form of a credit derivative) that has a first priority claim on the cash flows from the underlying exposures (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments), a national bank or Federal savings association may choose to set the riskweighted asset amount of the exposure equal to the amount of the exposure as determined in paragraph (c) of this section.
- (b) Total risk-weighted assets for securitization exposures. A national bank's or Federal savings association's total risk-weighted assets for securitization exposures equals sum of the risk-weighted asset amount for securitization exposures that the national bank or Federal savings association risk weights under §§ 3.41(c), 3.42(a)(1), and 3.43, 3.44, or 3.45, and paragraphs (e) through (j) of this section, as applicable.
- (c) Exposure amount of a securitization exposure—(1) On-balance sheet securitization exposures. The exposure amount of an on-balance sheet securitization exposure (excluding an available-for-sale or held-to-maturity security where the national bank or Federal savings association has made an AOCI opt-out election under

§3.22(b)(2), a repo-style transaction, eligible margin loan, OTC derivative contract, or cleared transaction) is equal to the carrying value of the exposure.

- (2) On-balance sheet securitization exposures held by a national bank or Federal savings association that has made an AOCI opt-out election. The exposure sheet amount of an on-balance securitization exposure that is an available-for-sale or held-to-maturity security held by a national bank or Federal savings association that has made an AOCI opt-out election under §3.22(b)(2) is the national bank's or Federal savings association's carrying value (including net accrued but unpaid interest and fees), less any net unrealized gains on the exposure and plus any net unrealized losses on the expo-
- (3) Off-balance sheet securitization exposures. (i) Except as provided in paragraph (j) of this section, the exposure sheet amount of an off-balance securitization exposure that is not a repo-style transaction, eligible margin loan, cleared transaction (other than a credit derivative), or an OTC derivative contract (other than a credit derivative) is the notional amount of the exposure. For an off-balance sheet securitization exposure to an ABCP program, such as an eligible ABCP liquidity facility, the notional amount may be reduced to the maximum potential amount that the national bank or Federal savings association could be required to fund given the ABCP program's current underlying assets (calculated without regard to the current credit quality of those assets).
- (ii) A national bank or Federal savings association must determine the exposure amount of an eligible ABCP liquidity facility for which the SSFA does not apply by multiplying the notional amount of the exposure by a CCF of 50 percent.
- (iii) A national bank or Federal savings association must determine the exposure amount of an eligible ABCP liquidity facility for which the SSFA applies by multiplying the notional amount of the exposure by a CCF of 100 percent.
- (4) Repo-style transactions, eligible margin loans, and derivative contracts. The exposure amount of a securitization ex-

- posure that is a repo-style transaction, eligible margin loan, or derivative contract (other than a credit derivative) is the exposure amount of the transaction as calculated under §3.34 or §3.37, as applicable.
- (d) Overlapping exposures. If a national bank or Federal savings association has multiple securitization exposures that provide duplicative coverage to the underlying exposures of a securitization (such as when a national bank or Federal savings association provides a program-wide credit enhancement and multiple pool-specific liquidity facilities to an ABCP program), the national bank or Federal savings association is not required to hold duplicative risk-based capital against the overlapping position. Instead, the national bank or Federal savings association may apply to the overlapping position the applicable risk-based capital treatment that results in the highest risk-based capital requirement.
- (e) Implicit support. If a national bank or Federal savings association provides support to a securitization in excess of the national bank's or Federal savings association's contractual obligation to provide credit support to the securitization (implicit support):
- (1) The national bank or Federal savings association must include in risk-weighted assets all of the underlying exposures associated with the securitization as if the exposures had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization; and
- (2) The national bank or Federal savings association must disclose publicly:
- (i) That it has provided implicit support to the securitization; and
- (ii) The risk-based capital impact to the national bank or Federal savings association of providing such implicit support.
- (f) Undrawn portion of a servicer cash advance facility. (1) Notwithstanding any other provision of this subpart, a national bank or Federal savings association that is a servicer under an eligible servicer cash advance facility is not required to hold risk-based capital against potential future cash advance payments that it may be required to

provide under the contract governing the facility.

- (2) For a national bank or Federal savings association that acts as a servicer, the exposure amount for a servicer cash advance facility that is not an eligible servicer cash advance facility is equal to the amount of all potential future cash advance payments that the national bank or Federal savings association may be contractually required to provide during the subsequent 12 month period under the contract governing the facility.
- (g) Interest-only mortgage-backed securities. Regardless of any other provisions in this subpart, the risk weight for a non-credit-enhancing interest-only mortgage-backed security may not be less than 100 percent.
- (h) Small-business loans and leases on personal property transferred with retained contractual exposure. (1) Regardless of any other provision of this subpart, a national bank or Federal savings association that has transferred small-business loans and leases on personal property (small-business obligations) with recourse must include in risk-weighted assets only its contractual exposure to the small-business obligations if all the following conditions are met:
- (i) The transaction must be treated as a sale under GAAP.
- (ii) The national bank or Federal savings association establishes and maintains, pursuant to GAAP, a non-capital reserve sufficient to meet the national bank's or Federal savings association's reasonably estimated liability under the contractual obligation.
- (iii) The small-business obligations are to businesses that meet the criteria for a small-business concern established by the Small Business Administration under section 3(a) of the Small Business Act (15 U.S.C. 632 et seq.).
- (iv) The national bank or Federal savings association is well capitalized, as defined in 12 CFR 6.4. For purposes of determining whether a national bank or Federal savings association is well capitalized for purposes of this paragraph (h), the national bank's or Federal savings association's capital ratios must be calculated without regard to the capital treatment for trans-

fers of small-business obligations under this paragraph (h).

- (2) The total outstanding amount of contractual exposure retained by a national bank or Federal savings association on transfers of small-business obligations receiving the capital treatment specified in paragraph (h)(1) of this section cannot exceed 15 percent of the national bank's or Federal savings association's total capital.
- (3) If a national bank or Federal savings association ceases to be well capitalized under 12 CFR 6.4 or exceeds the 15 percent capital limitation provided in paragraph (h)(2) of this section, the capital treatment under paragraph (h)(1) of this section will continue to apply to any transfers of small-business obligations with retained contractual exposure that occurred during the time that the national bank or Federal savings association was well capitalized and did not exceed the capital limit.
- (4) The risk-based capital ratios of the national bank or Federal savings association must be calculated without regard to the capital treatment for transfers of small-business obligations specified in paragraph (h)(1) of this section for purposes of:
- (i) Determining whether a national bank or Federal savings association is adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized under the OCC's prompt corrective action regulations; and
- (ii) Reclassifying a well-capitalized national bank or Federal savings association to adequately capitalized and requiring an adequately capitalized national bank or Federal savings association to comply with certain mandatory or discretionary supervisory actions as if the national bank or Federal savings association were in the next lower prompt-corrective-action category.
- (i) Nth-to-default credit derivatives—(1) Protection provider. A national bank or Federal savings association may assign a risk weight using the SSFA in §3.43 to an nth-to-default credit derivative in accordance with this paragraph (i). A national bank or Federal savings association must determine its exposure in the nth-to-default credit derivative as

the largest notional amount of all the underlying exposures.

- (2) For purposes of determining the risk weight for an nth-to-default credit derivative using the SSFA, the national bank or Federal savings association must calculate the attachment point and detachment point of its exposure as follows:
- (i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the national bank's or Federal savings association's exposure to the total notional amount of all underlying exposures. The ratio is expressed as a decimal value between zero and one. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the national bank's or Federal savings association's exposure. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the national bank's or Federal savings association's exposure.
- (ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the national bank's or Federal savings association's exposure in the nth-to-default credit derivative to the total notional amount of all underlying exposures. The ratio is expressed as a decimal value between zero and one.
- (3) A national bank or Federal savings association that does not use the SSFA to determine a risk weight for its nth-to-default credit derivative must assign a risk weight of 1,250 percent to the exposure.
- (4) Protection purchaser—(i) First-todefault credit derivatives. A national bank or Federal savings association that obtains credit protection on a group of underlying exposures through a first-to-default credit derivative that meets the rules of recognition of §3.36(b) must determine its risk-based capital requirement for the underlying exposures as if the national bank or Federal savings association thetically securitized the underlying exposure with the smallest riskweighted asset amount and had obtained no credit risk mitigant on the other underlying exposures. A national

- bank or Federal savings association must calculate a risk-based capital requirement for counterparty credit risk according to §3.34 for a first-to-default credit derivative that does not meet the rules of recognition of §3.36(b).
- (ii) Second-or-subsequent-to-default credit derivatives. (A) A national bank or Federal savings association that obtains credit protection on a group of underlying exposures through a nth-to-default credit derivative that meets the rules of recognition of §3.36(b) (other than a first-to-default credit derivative) may recognize the credit risk mitigation benefits of the derivative only if:
- (*I*) The national bank or Federal savings association also has obtained credit protection on the same underlying exposures in the form of first-through-(n-1)-to-default credit derivatives; or
- (2) If n-1 of the underlying exposures have already defaulted.
- (B) If a national bank or Federal savings association satisfies the requirements of paragraph (i)(4)(ii)(A) of this section, the national bank or Federal savings association must determine its risk-based capital requirement for the underlying exposures as if the national bank or Federal savings association had only synthetically securitized the underlying exposure with the nth smallest risk-weighted asset amount and had obtained no credit risk mitigant on the other underlying exposures.
- (C) A national bank or Federal savings association must calculate a risk-based capital requirement for counterparty credit risk according to §3.34 for a nth-to-default credit derivative that does not meet the rules of recognition of §3.36(b).
- (j) Guarantees and credit derivatives other than nth-to-default credit derivatives—(1) Protection provider. For a guarantee or credit derivative (other than an nth-to-default credit derivative) provided by a national bank or Federal savings association that covers the full amount or a pro rata share of a securitization exposure's principal and interest, the national bank or Federal savings association must risk weight the guarantee or credit derivative as if it holds the portion of the reference exposure covered by the guarantee or credit derivative.

- (2) Protection purchaser. (i) A national bank or Federal savings association that purchases a guarantee or OTC credit derivative (other than an nth-to-default credit derivative) that is recognized under §3.45 as a credit risk mitigant (including via collateral recognized under §3.37) is not required to compute a separate counterparty credit risk capital requirement under §3.31, in accordance with 34(c).
- (ii) If a national bank or Federal savings association cannot, or chooses not to, recognize a purchased credit derivative as a credit risk mitigant under §3.45, the national bank or Federal savings association must determine the exposure amount of the credit derivative under §3.34.
- (A) If the national bank or Federal savings association purchases credit protection from a counterparty that is not a securitization SPE, the national bank or Federal savings association must determine the risk weight for the exposure according to general risk weights under §3.32.
- (B) If the national bank or Federal savings association purchases the credit protection from a counterparty that is a securitization SPE, the national bank or Federal savings association must determine the risk weight for the exposure according to section §3.42, including §3.42(a)(4) for a credit derivative that has a first priority claim on the cash flows from the underlying exposures of the securitization SPE (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments).

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§ 3.43 Simplified supervisory formula approach (SSFA) and the gross-up approach.

(a) General requirements for the SSFA. To use the SSFA to determine the risk weight for a securitization exposure, a national bank or Federal savings association must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization

require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. A national bank or Federal savings association that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the exposure.

- (b) SSFA parameters. To calculate the risk weight for a securitization exposure using the SSFA, a national bank or Federal savings association must have accurate information on the following five inputs to the SSFA calculation:
- (1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using this subpart. K_G is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of K_G equal to 0.08).
- (2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:
 - (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;
- (iii) In the process of foreclosure;
- (iv) Held as real estate owned:
- (v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:
- (A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or
- (B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or
- (vi) Is in default.

- (3) Parameter A is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Except as provided in §3.42(i) for nth-to-default credit derivatives, parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the national bank or Federal savings association to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the national bank's or Federal savings association's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.
- (4) Parameter D is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Except as provided in section 42(i) for nth-to-default credit derivatives, parameter D equals parameter A plus the ratio of the current dollar amount of the securitization exposures that are pari passu with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.
- (5) A supervisory calibration parameter, p, is equal to 0.5 for securitization

- exposures that are not resecuritization exposures and equal to 1.5 for resecuritization exposures.
- (c) Mechanics of the SSFA. K_G and W are used to calculate KA, the augmented value of K_G, which reflects the observed credit quality of the underlying exposures. KA is defined in paragraph (d) of this section. The values of parameters A and D, relative to KA determine the risk weight assigned to a securitization exposure as described in paragraph (d) of this section. The risk weight assigned to a securitization exposure, or portion of a securitization exposure, as appropriate, is the larger of the risk weight determined in accordance with this paragraph (c) or paragraph (d) of this section and a risk weight of 20 percent.
- (1) When the detachment point, parameter D, for a securitization exposure is less than or equal to K_A , the exposure must be assigned a risk weight of 1,250 percent.
- (2) When the attachment point, parameter A, for a securitization exposure is greater than or equal to K_A , the national bank or Federal savings association must calculate the risk weight in accordance with paragraph (d) of this section.
- (3) When A is less than K_A and D is greater than K_A , the risk weight is a weighted-average of 1,250 percent and 1,250 percent times $K_{\rm SSFA}$ calculated in accordance with paragraph (d) of this section. For the purpose of this weighted-average calculation:

- (i) The weight assigned to 1,250 percent equals $\frac{\mathbf{K_A} \mathbf{A}}{\mathbf{D} \mathbf{A}}$
- (ii) The weight assigned to 1,250 percent times K_{SSFA} equals $\frac{D K_A}{D A}$.
- (iii) The risk weight will be set equal to:

$$RW = \left[\left(\frac{K_A - A}{D - A} \right) \cdot 1,250 \; percent \right] + \left[\left(\frac{D - K_A}{D - A} \right) \cdot 1,250 \; percent \cdot K_{SSFA} \right]$$

(d) SSFA equation. (1) The [BANK] must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$a=-\frac{1}{p\cdot K_A}$$

$$u = D - K_A$$

$$l = \max(A - K_A, 0)$$

e = 2.71828, the base of the natural logarithms.

(2) Then the [BANK] must calculate K_{SSFA} according to the following equation:

$$K_{SSFA} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u - l)}$$

(3) The risk weight for the exposure (expressed as a percent) is equal to

 $K_{SSFA} \times 1,250$.

- (e) Gross-up approach—(1) Applicability. A national bank or Federal savings association that is not subject to subpart F of this part may apply the gross-up approach set forth in this section instead of the SSFA to determine the risk weight of its securitization exposures, provided that it applies the gross-up approach to all of its securitization exposures, except as oth-
- erwise provided for certain securitization exposures in §§ 3.44 and 3.45.
- (2) To use the gross-up approach, a national bank or Federal savings association must calculate the following four inputs:
- (i) Pro rata share, which is the par value of the national bank's or Federal

savings association's securitization exposure as a percent of the par value of the tranche in which the securitization exposure resides;

- (ii) Enhanced amount, which is the par value of tranches that are more senior to the tranche in which the national bank's or Federal savings association's securitization resides;
- (iii) Exposure amount of the national bank's or Federal savings association's securitization exposure calculated under § 3.42(c); and
- (iv) Risk weight, which is the weighted-average risk weight of underlying exposures of the securitization as calculated under this subpart.
- (3) Credit equivalent amount. The credit equivalent amount of a securitization exposure under this section equals the sum of:
- (i) The exposure amount of the national bank's or Federal savings association's securitization exposure: and
- (ii) The pro rata share multiplied by the enhanced amount, each calculated in accordance with paragraph (e)(2) of this section.
- (4) Risk-weighted assets. To calculate risk-weighted assets for a securitization exposure under the gross-up approach, a national bank or Federal savings association must apply the risk weight required under paragraph (e)(2) of this section to the credit equivalent amount calculated in paragraph (e)(3) of this section.
- (f) Limitations. Notwithstanding any other provision of this section, a national bank or Federal savings association must assign a risk weight of not less than 20 percent to a securitization exposure.

§ 3.44 Securitization exposures to which the SSFA and gross-up approach do not apply.

- (a) General requirement. A national bank or Federal savings association must assign a 1,250 percent risk weight to all securitization exposures to which the national bank or Federal savings association does not apply the SSFA or the gross-up approach under §3.43, except as set forth in this section.
- (b) Eligible ABCP liquidity facilities. A national bank or Federal savings association may determine the risk-weighted asset amount of an eligible ABCP li-

- quidity facility by multiplying the exposure amount by the highest risk weight applicable to any of the individual underlying exposures covered by the facility.
- (c) A securitization exposure in a second loss position or better to an ABCP program—(1) Risk weighting. A national bank or Federal savings association may determine the risk-weighted asset amount of a securitization exposure that is in a second loss position or better to an ABCP program that meets the requirements of paragraph (c)(2) of this section by multiplying the exposure amount by the higher of the following risk weights:
 - (i) 100 percent; and
- (ii) The highest risk weight applicable to any of the individual underlying exposures of the ABCP program.
- (2) Requirements. (i) The exposure is not an eligible ABCP liquidity facility;
- (ii) The exposure must be economically in a second loss position or better, and the first loss position must provide significant credit protection to the second loss position;
- (iii) The exposure qualifies as investment grade; and
- (iv) The national bank or Federal savings association holding the exposure must not retain or provide protection to the first loss position.

§ 3.45 Recognition of credit risk mitigants for securitization exposures.

- (a) General. (1) An originating national bank or Federal savings association that has obtained a credit risk mitigant to hedge its exposure to a synthetic or traditional securitization that satisfies the operational criteria provided in §3.41 may recognize the credit risk mitigant under §§3.36 or 3.37, but only as provided in this section.
- (2) An investing national bank or Federal savings association that has obtained a credit risk mitigant to hedge a securitization exposure may recognize the credit risk mitigant under §§3.36 or 3.37, but only as provided in this section.
- (b) *Mismatches*. A national bank or Federal savings association must make

§§ 3.46-3.50

any applicable adjustment to the protection amount of an eligible guarantee or credit derivative as required in §3.36(d), (e), and (f) for any hedged securitization exposure. In the context of a synthetic securitization, when an eligible guarantee or eligible credit derivative covers multiple hedged exposures that have different residual maturities, the national bank or Federal savings association must use the longest residual maturity of any of the hedged exposures as the residual maturity of all hedged exposures.

§§ 3.46-3.50 [Reserved]

RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

§ 3.51 Introduction and exposure measurement.

- (a) General. (1) To calculate its risk-weighted asset amounts for equity exposures that are not equity exposures to an investment fund, a national bank or Federal savings association must use the Simple Risk-Weight Approach (SRWA) provided in 3.52. A national bank or Federal savings association must use the look-through approaches provided in §3.53 to calculate its risk-weighted asset amounts for equity exposures to investment funds.
- (2) A national bank or Federal savings association must treat an investment in a separate account (as defined in §3.2) as if it were an equity exposure to an investment fund as provided in §3.53.
- (3) Stable value protection. (i) Stable value protection means a contract where the provider of the contract is obligated to pay:
- (A) The policy owner of a separate account an amount equal to the short-fall between the fair value and cost basis of the separate account when the policy owner of the separate account surrenders the policy; or
- (B) The beneficiary of the contract an amount equal to the shortfall between the fair value and book value of a specified portfolio of assets.
- (ii) A national bank or Federal savings association that purchases stable value protection on its investment in a separate account must treat the portion of the carrying value of its investment in the separate account attrib-

utable to the stable value protection as an exposure to the provider of the protection and the remaining portion of the carrying value of its separate account as an equity exposure to an investment fund.

- (iii) A national bank or Federal savings association that provides stable value protection must treat the exposure as an equity derivative with an adjusted carrying value determined as the sum of paragraphs (b)(1) and (3) of this section.
- (b) Adjusted carrying value. For purposes of §§3.51 through 3.53, the adjusted carrying value of an equity exposure is:
- (1) For the on-balance sheet component of an equity exposure (other than an equity exposure that is classified as available-for-sale where the national bank or Federal savings association has made an AOCI opt-out election under §3.22(b)(2)), the national bank's or Federal savings association's carrying value of the exposure;
- (2) For the on-balance sheet component of an equity exposure that is classified as available-for-sale where the national bank or Federal savings association has made an AOCI opt-out election under §3.22(b)(2), the national bank's or Federal savings association's carrying value of the exposure less any net unrealized gains on the exposure that are reflected in such carrying value but excluded from the national bank's or Federal savings association's regulatory capital components;
- (3) For the off-balance sheet component of an equity exposure that is not an equity commitment, the effective notional principal amount of the exposure, the size of which is equivalent to a hypothetical on-balance sheet position in the underlying equity instrument that would evidence the same change in fair value (measured in dollars) given a small change in the price of the underlying equity instrument, minus the adjusted carrying value of the on-balance sheet component of the exposure as calculated in paragraph (b)(1) of this section; and
- (4) For a commitment to acquire an equity exposure (an equity commitment), the effective notional principal amount of the exposure is multiplied

by the following conversion factors (CFs):

- (i) Conditional equity commitments with an original maturity of one year or less receive a CF of 20 percent.
- (ii) Conditional equity commitments with an original maturity of over one year receive a CF of 50 percent.
- (iii) Unconditional equity commitments receive a CF of 100 percent.

§ 3.52 Simple risk-weight approach (SRWA).

- (a) General. Under the SRWA, a national bank's or Federal savings association's total risk-weighted assets for equity exposures equals the sum of the risk-weighted asset amounts for each of the national bank's or Federal savings association's individual equity exposures (other than equity exposures to an investment fund) as determined under this section and the risk-weighted asset amounts for each of the national bank's or Federal savings association's individual equity exposures to an investment fund as determined under §3.53.
- (b) SRWA computation for individual equity exposures. A national bank or Federal savings association must dethe risk-weighted asset termine amount for an individual equity exposure (other than an equity exposure to an investment fund) by multiplying the adjusted carrying value of the equity exposure or the effective portion and ineffective portion of a hedge pair (as defined in paragraph (c) of this section) by the lowest applicable risk weight in this paragraph (b).
- (1) Zero percent risk weight equity exposures. An equity exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, an MDB, and any other entity whose credit exposures receive a zero percent risk weight under §3.32 may be assigned a zero percent risk weight.
- (2) 20 percent risk weight equity exposures. An equity exposure to a PSE, Federal Home Loan Bank or the Federal Agricultural Mortgage Corporation (Farmer Mac) must be assigned a 20 percent risk weight.
- (3) 100 percent risk weight equity exposures. The equity exposures set forth in

this paragraph (b)(3) must be assigned a 100 percent risk weight.

- (i) Community development equity exposures. An equity exposure that qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act, excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a consolidated small business investment company described in section 302 of the Small Business Investment Act.
- (ii) Effective portion of hedge pairs. The effective portion of a hedge pair.
- (iii) Non-significant equity exposures. Equity exposures, excluding significant investments in the capital of an unconsolidated financial institution in the form of common stock and exposures to an investment firm that would meet the definition of a traditional securitization were it not for the application of paragraph (8) of that definition in §3.2 and has greater than immaterial leverage, to the extent that the aggregate adjusted carrying value of the exposures does not exceed 10 percent of the national bank's or Federal savings association's total capital.
- (A) To compute the aggregate adjusted carrying value of a national bank's or Federal savings association's equity exposures for purposes of this section, the national bank or Federal savings association may exclude equity exposures described in paragraphs (b)(1), (b)(2), (b)(3)(i), and (b)(3)(ii) of this section, the equity exposure in a hedge pair with the smaller adjusted carrying value, and a proportion of each equity exposure to an investment fund equal to the proportion of the assets of the investment fund that are not equity exposures or that meet the criterion of paragraph (b)(3)(i) of this section. If a national bank or Federal savings association does not know the actual holdings of the investment fund. the national bank or Federal savings association may calculate the proportion of the assets of the fund that are not equity exposures based on the terms of the prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. If the sum of the investment limits for all exposure classes within

the fund exceeds 100 percent, the national bank or Federal savings association must assume for purposes of this section that the investment fund invests to the maximum extent possible in equity exposures.

- (B) When determining which of a national bank's or Federal savings association's equity exposures qualify for a 100 percent risk weight under this paragraph (b), a national bank or Federal savings association first must include equity exposures to unconsolidated small business investment companies or held through consolidated small business investment companies described in section 302 of the Small Business Investment Act, then must include publicly traded equity exposures (including those held indirectly through investment funds), and then must include non-publicly traded equity exposures (including those held indirectly through investment funds).
- (4) 250 percent risk weight equity exposures. Significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not deducted from capital pursuant to §3.22(d) are assigned a 250 percent risk weight.
- (5) 300 percent risk weight equity exposures. A publicly traded equity exposure (other than an equity exposure described in paragraph (b)(7) of this section and including the ineffective portion of a hedge pair) must be assigned a 300 percent risk weight.
- (6) 400 percent risk weight equity exposures. An equity exposure (other than an equity exposure described in paragraph (b)(7)) of this section that is not publicly traded must be assigned a 400 percent risk weight.
- (7) 600 percent risk weight equity exposures. An equity exposure to an investment firm must be assigned a 600 percent risk weight, provided that the investment firm:
- (i) Would meet the definition of a traditional securitization were it not

for the application of paragraph (8) of that definition; and

- (ii) Has greater than immaterial leverage.
- (c) Hedge transactions—(1) Hedge pair. A hedge pair is two equity exposures that form an effective hedge so long as each equity exposure is publicly traded or has a return that is primarily based on a publicly traded equity exposure.
- (2) Effective hedge. Two equity exposures form an effective hedge if the exposures either have the same remaining maturity or each has a remaining maturity of at least three months: the hedge relationship is formally documented in a prospective manner (that is, before the national bank or Federal savings association acquires at least one of the equity exposures); the documentation specifies the measure of effectiveness (E) the national bank or Federal savings association will use for the hedge relationship throughout the life of the transaction; and the hedge relationship has an E greater than or equal to 0.8. A national bank or Federal savings association must measure E at least quarterly and must use one of three alternative measures of E as set forth in this paragraph (c).
- (i) Under the dollar-offset method of measuring effectiveness, the national bank or Federal savings association must determine the ratio of value change (RVC). The RVC is the ratio of the cumulative sum of the changes in value of one equity exposure to the cumulative sum of the changes in the value of the other equity exposure. If RVC is positive, the hedge is not effective and E equals 0. If RVC is negative and greater than or equal to -1 (that is, between zero and -1), then E equals the absolute value of RVC. If RVC is negative and less than -1, then E equals 2 plus RVC.
- (ii) Under the variability-reduction method of measuring effectiveness:

$$E = 1 - \frac{\sum_{t=1}^{T} (X_{t} - X_{t-1})^{2}}{\sum_{t=1}^{T} (A_{t} - A_{t-1})^{2}}, \text{ where}$$

- (A) $X_{t} = A_{t} B_{t};$
- (B) $A_t =$ the value at time t of one exposure in a hedge pair; and
- (C) B_t = the value at time t of the other exposure in a hedge pair.
- (iii) Under the regression method of measuring effectiveness, E equals the coefficient of determination of a regression in which the change in value of one exposure in a hedge pair is the dependent variable and the change in value of the other exposure in a hedge pair is the independent variable. However, if the estimated regression coefficient is positive, then E equals zero.
- (3) The effective portion of a hedge pair is E multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.
- (4) The ineffective portion of a hedge pair is (1–E) multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

§ 3.53 Equity exposures to investment funds.

(a) Available approaches. (1) Unless the exposure meets the requirements for a community development equity exposure under §3.52(b)(3)(i), a national bank or Federal savings association must determine the risk-weighted asset amount of an equity exposure to an investment fund under the full lookthrough approach described in paragraph (b) of this section, the simple modified look-through approach described in paragraph (c) of this section, the alterative modified lookthrough approach described paragraph (d) of this section, provided, however, that the minimum risk weight that may be assigned to an equity exposure under this section is 20 percent.

- (2) The risk-weighted asset amount of an equity exposure to an investment fund that meets the requirements for a community development equity exposure in §3.52(b)(3)(i) is its adjusted carrying value.
- (3) If an equity exposure to an investment fund is part of a hedge pair and the national bank or Federal savings association does not use the full lookthrough approach, the national bank or Federal savings association must use the ineffective portion of the hedge pair as determined §3.52(c) as the adjusted carrying value for the equity exposure to the investment fund. The risk-weighted asset amount of the effective portion of the hedge pair is equal to its adjusted carrying value.
- (b) Full look-through approach. A national bank or Federal savings association that is able to calculate a risk-weighted asset amount for its proportional ownership share of each exposure held by the investment fund (as calculated under this subpart as if the proportional ownership share of the adjusted carrying value of each exposure were held directly by the national bank or Federal savings association) may set the risk-weighted asset amount of the national bank's or Federal savings association's exposure to the fund equal to the product of:
- (1) The aggregate risk-weighted asset amounts of the exposures held by the fund as if they were held directly by

§§ 3.54-3.60

the national bank or Federal savings association; and

- (2) The national bank's or Federal savings association's proportional ownership share of the fund.
- (c) Simple modified look-through approach. Under the simple modified look-through approach, the riskweighted asset amount for a national bank's or Federal savings association's equity exposure to an investment fund equals the adjusted carrying value of the equity exposure multiplied by the highest risk weight that applies to any exposure the fund is permitted to hold under the prospectus, partnership agreement, or similar agreement that defines the fund's permissible investments (excluding derivative contracts that are used for hedging rather than speculative purposes and that do not constitute a material portion of the fund's exposures).
- (d) Alternative modified look-through approach. Under the alternative modified look-through approach, a national bank or Federal savings association may assign the adjusted carrying value of an equity exposure to an investment fund on a pro rata basis to different risk weight categories under this subpart based on the investment limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. The risk-weighted asset amount for the national bank's or Federal savings association's equity exposure to the investment fund equals the sum of each portion of the adjusted carrying value assigned to an exposure type multiplied by the applicable risk weight under this subpart. If the sum of the investment limits for all exposure types within the fund exceeds 100 percent, the national bank or Federal savings association must assume that the fund invests to the maximum extent permitted under its investment limits in the exposure type with the highest applicable risk weight under this subpart and continues to make investments in order of the exposure type with the next highest applicable risk weight under this subpart until the maximum total investment level is reached. If more than one exposure type applies to an exposure, the national bank or Federal savings associa-

tion must use the highest applicable risk weight. A national bank or Federal savings association may exclude derivative contracts held by the fund that are used for hedging rather than for speculative purposes and do not constitute a material portion of the fund's exposures.

§§ 3.54-3.60 [Reserved]

DISCLOSURES

§ 3.61 Purpose and scope.

Sections 3.61-3.63 of this subpart establish public disclosure requirements related to the capital requirements described in subpart B of this part for a national bank or Federal savings association with total consolidated assets of \$50 billion or more as reported on the national bank's or Federal savings association's most recent year-end Call Report that is not an advanced approaches national bank or Federal savings association making public disclosures pursuant to §3.172. An advanced approaches national bank or Federal savings association that has not received approval from the OCC to exit parallel run pursuant to §3.121(d) is subject to the disclosure requirements described in §§ 3.62 and 3.63. Such a national bank or Federal savings association must comply with §3.62 unless it is a consolidated subsidiary of a bank holding company, savings and loan holding company, or depository institution that is subject to these disclosure requirements or a subsidiary of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction. For purposes of this section, total consolidated assets are determined based on the average of the national bank's or Federal savings association's total consolidated assets in the four most recent quarters as reported on the Call Report; or the average of the national bank's or Federal savings association's total consolidated assets in the most recent consecutive quarters as reported quarterly on the national bank's or Federal savings association's Call Report if the national bank or Federal savings association has not filed such a report for each of the most recent four quarters.

§ 3.62 Disclosure requirements.

(a) A national bank or Federal savings association described in §3.61 must provide timely public disclosures each calendar quarter of the information in the applicable tables in §3.63. If a significant change occurs, such that the most recent reported amounts are no longer reflective of the national bank's or Federal savings association's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be disclosed as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter (for example, a general summary of the national bank's or Federal savings association's risk management objectives and policies, reporting system, and definitions) may be disclosed annually after the end of the fourth calendar quarter, provided that any significant changes are disclosed in the interim. The national bank's or Federal savings association's management may provide all of the disclosures required by §§ 3.61 through 3.63 in one place on the national bank's or Federal savings association's public Web site or may provide the disclosures in more than one public financial report or other regulatory reports, provided that the national bank or Federal savings association publicly provides a summary table specifically indicating the location(s) of all such disclosures.

(b) A national bank or Federal savings association described in §3.61 must have a formal disclosure policy approved by the board of directors that addresses its approach for determining the disclosures it makes. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this subpart, and must ensure that appropriate review of the disclosures takes place. One or more senior officers of the national bank or Federal savings association must attest that the disclosures meet the requirements of this subpart.

(c) If a national bank or Federal savings association described in §3.61 concludes that specific commercial or financial information that it would otherwise be required to disclose under this section would be exempt from disclosure by the OCC under the Freedom of Information Act (5 U.S.C. 552), then the national bank or Federal savings association is not required to disclose that specific information pursuant to this section, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

§ 3.63 Disclosures by national banks or Federal savings associations described in § 3.61.

- (a) Except as provided in §3.62, a national bank or Federal savings association described in §3.61 must make the disclosures described in Tables 1 through 10 of this section. The national bank or Federal savings association must make these disclosures publicly available for each of the last three years (that is, twelve quarters) or such shorter period beginning on January 1, 2015.
- (b) A national bank or Federal savings association must publicly disclose each quarter the following:
- (1) Common equity tier 1 capital, additional tier 1 capital, tier 2 capital, tier 1 and total capital ratios, including the regulatory capital elements and all the regulatory adjustments and deductions needed to calculate the numerator of such ratios;
- (2) Total risk-weighted assets, including the different regulatory adjustments and deductions needed to calculate total risk-weighted assets;
- (3) Regulatory capital ratios during any transition periods, including a description of all the regulatory capital elements and all regulatory adjustments and deductions needed to calculate the numerator and denominator of each capital ratio during any transition period; and
- (4) A reconciliation of regulatory capital elements as they relate to its balance sheet in any audited consolidated financial statements.

12 CFR Ch. I (1-1-14 Edition)

TABLE 1 TO § 3.63—SCOPE OF APPLICATION

Qualitative Disclosures	(a) (b)	The name of the top corporate entity in the group to which subpart D of this part applies. A brief description of the differences in the basis for consolidating entities¹ for accounting and regulatory purposes, with a description of those entities: (1) That are fully consolidated; (2) That are deconsolidated and deducted from total capital; (3) For which the total capital requirement is deducted; and (4) That are neither consolidated nor deducted (for example, where the investment in the entity is assigned a risk weight in accordance with this subpart). Any restrictions, or other major impediments, on transfer of funds or
	(d)	total capital within the group. The aggregate amount of surplus capital of insurance subsidiaries included in the total capital of the consolidated group.
	(e)	The aggregate amount by which actual total capital is less than the minimum total capital requirement in all subsidiaries, with total capital requirements and the name(s) of the subsidiaries with such deficiencies.

¹ Entities include securities, insurance and other financial subsidiaries, commercial subsidiaries (where permitted), and significant minority equity investments in insurance, financial and commercial entities.

TABLE 2 TO § 3.63—CAPITAL STRUCTURE

	•	
Qualitative Disclosures	(a)	Summary information on the terms and conditions of the main fea- tures of all regulatory capital instruments.
Quantitative Disclosures	(b)	The amount of common equity tier 1 capital, with separate disclosure of: (1) Common stock and related surplus; (2) Retained earnings; (3) Common equity minority interest; (4) AOCI; and (5) Regulatory adjustments and deductions made to common equity
		tier 1 capital.
	(c)	The amount of tier 1 capital, with separate disclosure of: (1) Additional tier 1 capital elements, including additional tier 1 capital instruments and tier 1 minority interest not included in common equity tier 1 capital; and (2) Regulatory adjustments and deductions made to tier 1 capital.
	(d)	The amount of total capital, with separate disclosure of: (1) Tier 2 capital elements, including tier 2 capital instruments and total capital minority interest not included in tier 1 capital; and (2) Regulatory adjustments and deductions made to total capital.

TABLE 3 TO § 3.63—CAPITAL ADEQUACY

Qualitative disclosures	(a)	A summary discussion of the national bank's or Federal savings as-
	` ′	sociation's approach to assessing the adequacy of its capital to
		support current and future activities.
Quantitative disclosures	(b)	Risk-weighted assets for:
quantitative discissions in the same of th	(0)	(1) Exposures to sovereign entities;
		(2) Exposures to certain supranational entities and MDBs;
		(3) Exposures to depository institutions, foreign banks, and credit
		unions:
		(4) Exposures to PSEs;
		(5) Corporate exposures;
		(6) Residential mortgage exposures;
		(7) Statutory multifamily mortgages and pre-sold construction loans;
		(8) HVCRE loans;
		(9) Past due loans;
		(10) Other assets;
		(11) Cleared transactions;
		(12) Default fund contributions;
		(13) Unsettled transactions;
		(14) Securitization exposures; and
		(15) Equity exposures.
	(c)	Standardized market risk-weighted assets as calculated under sub-
	(6)	part F of this part.
	(d)	·
	(4)	(1) For the top consolidated group; and
		(2) For each depository institution subsidiary.
	(e)	Total standardized risk-weighted assets.
	(0)	Total dandardized not weighted desets.

TABLE 4 TO § 3.63—CAPITAL CONSERVATION BUFFER

Quantitative Disclosures	(a)	At least quarterly, the national bank or Federal savings association must calculate and publicly disclose the capital conservation buffer as described under §3.11.
	(b)	At least quarterly, the national bank or Federal savings association must calculate and publicly disclose the eligible retained income of the national bank or Federal savings association, as described under § 3.11.
	(c)	At least quarterly, the national bank or Federal savings association must calculate and publicly disclose any limitations it has on distributions and discretionary bonus payments resulting from the capital conservation buffer framework described under §3.11, including the maximum payout amount for the quarter.

(c) General qualitative disclosure requirement. For each separate risk area described in Tables 5 through 10, the national bank or Federal savings association must describe its risk management objectives and policies, including: Strategies and processes; the structure and organization of the relevant risk

management function; the scope and nature of risk reporting and/or measurement systems; policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

TABLE 5 TO § 3.63 1—CREDIT RISK: GENERAL DISCLOSURES

TABLE 5 TO § 3.63 '—CREDIT HISK: GENERAL DISCLOSURES		
Qualitative Disclosures	(a)	The general qualitative disclosure requirement with respect to credit risk (excluding counterparty credit risk disclosed in accordance with Table 6), including the: (1) Policy for determining past due or delinquency status; (2) Policy for placing loans on nonaccrual; (3) Policy for returning loans to accrual status; (4) Definition of and policy for identifying impaired loans (for financial accounting purposes); (5) Description of the methodology that the national bank or Federal savings association uses to estimate its allowance for loan and lease losses, including statistical methods used where applicable; (6) Policy for charging-off uncollectible amounts; and (7) Discussion of the national bank's or Federal savings association's credit risk management policy.
Quantitative Disclosures	(b)	Total credit risk exposures and average credit risk exposures, after accounting offsets in accordance with GAAP, without taking into account the effects of credit risk mitigation techniques (for example, collateral and netting not permitted under GAAP), over the period categorized by major types of credit exposure. For example, national banks or Federal savings associations could use categories similar to that used for financial statement purposes. Such categories might include, for instance (1) Loans, off-balance sheet commitments, and other non-derivative off-balance sheet exposures; (2) Debt securities; and (3) OTC derivatives. ²
	(c)	Geographic distribution of exposures, categorized in significant areas by major types of credit exposure. ³
	(d)	Industry or counterparty type distribution of exposures, categorized by major types of credit exposure.
	(e)	By major industry or counterparty type: (1) Amount of impaired loans for which there was a related allowance under GAAP; (2) Amount of impaired loans for which there was no related allowance under GAAP; (3) Amount of loans past due 90 days and on nonaccrual; (4) Amount of loans past due 90 days and still accruing; 4 (5) The balance in the allowance for loan and lease losses at the end of each period, disaggregated on the basis of the national bank's or Federal savings association's impairment method. To disaggregate the information required on the basis of impairment methodology, an entity shall separately disclose the amounts based on the requirements in GAAP; and

TABLE 5 TO § 3.63 1—CREDIT RISK: GENERAL DISCLOSURES—Continued

(f)	Amount of impaired loans and, if available, the amount of past due		
	loans categorized by significant geographic areas including, if		
	practical, the amounts of allowances related to each geographical		
	area,5 further categorized as required by GAAP.		
(g)	Reconciliation of changes in ALLL.6		
(h)	Remaining contractual maturity delineation (for example, one year		
	or loss) of the whole portfolio estagorized by gradit expecure		

TABLE 6 TO § 3.63—GENERAL DISCLOSURE FOR COUNTERPARTY CREDIT RISK-RELATED EXPOSURES

Qualitative Disclosures	(a)	The general qualitative disclosure requirement with respect to OTC derivatives, eligible margin loans, and repo-style transactions, including a discussion of: (1) The methodology used to assign credit limits for counterparty credit exposures; (2) Policies for securing collateral, valuing and managing collateral, and establishing credit reserves; (3) The primary types of collateral taken; and (4) The impact of the amount of collateral the national bank or Federal savings association would have to provide given a deterioration in the national bank's or Federal savings association's own creditworthiness.
Quantitative Disclosures	(c)	Gross positive fair value of contracts, collateral held (including type, for example, cash, government securities), and net unsecured credit exposure.¹ A national bank or Federal savings association also must disclose the notional value of credit derivative hedges purchased for counterparty credit risk protection and the distribution of current credit exposure by exposure type.² Notional amount of purchased and sold credit derivatives, segregated between use for the national bank's or Federal savings association's own credit portfolio and in its intermediation activities, including the distribution of the credit derivative products used, categorized further by protection bought and sold within each product group.

<sup>Net unsecured credit exposure is the credit exposure after considering both the benefits from legally enforceable netting agreements and collateral arrangements without taking into account haircuts for price volatility, liquidity, etc.

2 This may include interest rate derivative contracts, foreign exchange derivative contracts, equity derivative contracts, credit derivatives, commodity or other derivative contracts, repo-style transactions, and eligible margin loans.</sup>

TABLE 7 TO § 3.63—CREDIT RISK MITIGATION 12

Qualitative Disclosures	(a)	The general qualitative disclosure requirement with respect to credit risk mitigation, including:
		(1) Policies and processes for collateral valuation and management; (2) A description of the main types of collateral taken by the national bank or Federal savings association;
		(3) The main types of guarantors/credit derivative counterparties and their creditworthiness; and
		(4) Information about (market or credit) risk concentrations with respect to credit risk mitigation.
Quantitative Disclosures	(b)	For each separately disclosed credit risk portfolio, the total exposure that is covered by eligible financial collateral, and after the application of haircuts.
	(c)	For each separately disclosed portfolio, the total exposure that is covered by guarantees/credit derivatives and the risk-weighted asset amount associated with that exposure.

¹At a minimum, a national bank or Federal savings association must provide the disclosures in Table 7 in relation to credit risk mitigation that has been recognized for the purposes of reducing capital requirements under this subpart. Where relevant, national banks or Federal savings associations are encouraged to give further information about mitigants that have not been recognized to the tensor of the control of the c

¹ Table 5 does not cover equity exposures, which should be reported in Table 9.
2 See, for example, ASC Topic 815–10 and 210, as they may be amended from time to time.
3 Geographical areas may consist of individual countries, groups of countries, are groups within countries. A national bank or Federal savings association might choose to define the geographical areas based on the way the national bank's or Federal savings association's portfolio is geographically managed. The criteria used to allocate the loans to geographical areas must be specified.
4 A national bank or Federal savings association is encouraged also to provide an analysis of the aging of past-due loans.
5 The portion of the general allowance that is not allocated to a geographical area should be disclosed separately.
6 The reconciliation should include the following: A description of the allowance; the opening balance of the allowance; charge-offs taken against the allowance during the period; amounts provided (or reversed) for estimated probable loan losses during the period; any other adjustments (for example, exchange rate differences, business combinations, acquisitions and disposals of subsidiaries), including transfers between allowances; and the closing balance of the allowance. Charge-offs and recoveries that have been recorded directly to the income statement should be disclosed separately.

toffall baths of rederia savings associations are disconligious of the ground of the ground of the ground of the ground of the purposes of this subpart, as synthetic securitization exposures should be excluded from the credit risk mitigation disclosures and included within those relating to securitization (Table 8).

TABLE 8 TO § 3.63—SECURITIZATION

	TABLE 8 TO §	3.63—SECURITIZATION
Qualitative Disclosures	(a)	The general qualitative disclosure requirement with respect to a securitization (including synthetic securitizations), including a discussion of: (1) The national bank's or Federal savings association's objectives for securitizing assets, including the extent to which these activities transfer credit risk of the underlying exposures away from the national bank or Federal savings association to other entities and including the type of risks assumed and retained with resecuritization activity; 1 (2) The nature of the risks (e.g. liquidity risk) inherent in the securitized assets; (3) The roles played by the national bank or Federal savings association in the securitization process ² and an indication of the extent of the national bank's or Federal savings association's involvement in each of them; (4) The processes in place to monitor changes in the credit and market risk of securitization exposures including how those processes differ for resecuritization exposures including how those processes differ for resecuritization exposures including securitization and resecuritization exposures; and (6) The risk-based capital approaches that the national bank or Federal savings association follows for its securitization exposures including the type of securitization exposure to which each approach applies.
	(b)	A list of: (1) The type of securitization SPEs that the national bank or Federal savings association, as sponsor, uses to securitize third-party exposures. The national bank or Federal savings association must indicate whether it has exposure to these SPEs, either on- or off-balance sheet; and (2) Affiliated entities: (i) That the national bank or Federal savings association manages or advises; and (ii) That invest either in the securitization exposures that the national bank or Federal savings association has securitized or in securitization SPEs that the national bank or Federal savings as-
	(c)	sociation sponsors. ³ Summary of the national bank's or Federal savings association's accounting policies for securitization activities, including: (1) Whether the transactions are treated as sales or financings; (2) Recognition of gain-on-sale; (3) Methods and key assumptions applied in valuing retained or purchased interests; (4) Changes in methods and key assumptions from the previous period for valuing retained interests and impact of the changes; (5) Treatment of synthetic securitizations; (6) How exposures intended to be securitized are valued and whether they are recorded under subpart D of this part; and (7) Policies for recognizing liabilities on the balance sheet for arrangements that could require the national bank or Federal savings association to provide financial support for securitized assets.
Quantitative Disclosures	(d)	An explanation of significant changes to any quantitative information since the last reporting period. The total outstanding exposures securitized by the national bank or Federal savings association in securitizations that meet the operational criteria provided in §3.41 (categorized into traditional and synthetic securitizations), by exposure type, separately for
	(f)	securitizations of third-party exposures for which the bank acts only as sponsor. ⁴ For exposures securitized by the national bank or Federal savings association in securitizations that meet the operational criteria in § 3.41: (1) Amount of securitized assets that are impaired/past due categorized by exposure type; 5 and (2) Losses recognized by the national bank or Federal savings as-
	(g)	sociation during the current period categorized by exposure type. ⁶ The total amount of outstanding exposures intended to be securitized categorized by exposure type. Aggregate amount of: (1) On-balance sheet securitization exposures retained or pur- chased categorized by exposure type; and (2) Off-balance sheet securitization exposures categorized by expo- sure type.

TABLE 8 TO § 3.63—SECURITIZATION—Continued

(i)	 Aggregate amount of securitization exposures retained or pur- chased and the associated capital requirements for these expo- sures, categorized between securitization and resecuritization ex- posures, further categorized into a meaningful number of risk weight bands and by risk-based capital approach (e.g., SSFA); and
	(2) Exposures that have been deducted entirely from tier 1 capital, CEIOs deducted from total capital (as described in §3.42(a)(1), and other exposures deducted from total capital should be dis- closed separately by exposure type.
(j)	Summary of current year's securitization activity, including the amount of exposures securitized (by exposure type), and recognized gain or loss on sale by exposure type.
(k)	Aggregate amount of resecuritization exposures retained or purchased categorized according to:
	(1) Exposures to which credit risk mitigation is applied and those not applied; and
	(2) Exposures to guarantors categorized according to guarantor creditworthiness categories or guarantor name.

TABLE 9 TO § 3.63—EQUITIES NOT SUBJECT TO SUBPART F OF THIS PART

Qualitative Disclosures	(a)	The general qualitative disclosure requirement with respect to equity risk for equities not subject to subpart F of this part, including: (1) Differentiation between holdings on which capital gains are expected and those taken under other objectives including for relationship and strategic reasons; and
		(2) Discussion of important policies covering the valuation of and accounting for equity holdings not subject to subpart F of this part. This includes the accounting techniques and valuation meth- odologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices.
Quantitative Disclosures	(b)	Value disclosed on the balance sheet of investments, as well as the fair value of those investments; for securities that are publicly traded, a comparison to publicly-quoted share values where the share price is materially different from fair value.
	(c)	The types and nature of investments, including the amount that is: (1) Publicly traded; and (2) Non publicly traded.
	(d)	The cumulative realized gains (losses) arising from sales and liquidations in the reporting period.
	(e)	(1) Total unrealized gains (losses).1
		(2) Total latent revaluation gains (losses).2
		(3) Any amounts of the above included in tier 1 or tier 2 capital.
	(f)	Capital requirements categorized by appropriate equity groupings, consistent with the national bank's or Federal savings association's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition regarding regulatory capital requirements.

¹ Unrealized gains (losses) recognized on the balance sheet but not through earnings.

¹The national bank or Federal savings association should describe the structure of resecuritizations in which it participates; this description should be provided for the main categories of resecuritization products in which the national bank or Federal savings association is active.

²For example, these roles may include originator, investor, servicer, provider of credit enhancement, sponsor, liquidity provider, or swap provider.

³Such affiliated entities may include, for example, money market funds, to be listed individually, and personal and private trusts, to be noted collectively.

⁴"Exposures securitized" include underlying exposures originated by the bank, whether generated by them or purchased, and recognized in the balance sheet, from third parties, and third-party exposures included in sponsored transactions. Securitization transactions (including underlying exposures originally on the bank's balance sheet and underlying exposures acquired by the bank from third-party entities) in which the originating bank does not retain any securitization exposure should be shown separately but need only be reported for the year of inception. Banks are required to disclose exposures regardless of whether there is a capital charge under this part.

⁵ Include credit-related other than temporary impairment (OTTI).

⁶ For example, charge-offs/allowances (if the assets remain on the bank's balance sheet) or credit-related OTTI of interest-only strips and other retained residual interests, as well as recognition of liabilities for probable future financial support required of the bank with respect to securitized assets.

²Unrealized gains (losses) not recognized either on the balance sheet or through earnings.

TABLE 10 TO § 3.63—INTEREST RATE RISK FOR NON-TRADING ACTIVITIES

Qualitative disclosures	(a)	The general qualitative disclosure requirement, including the nature of interest rate risk for non-trading activities and key assumptions, including assumptions regarding loan prepayments and behavior of non-maturity deposits, and frequency of measurement of interest rate risk for non-trading activities.
Quantitative disclosures	(b)	The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring interest rate risk for non-trading activities, categorized by currency (as appropriate).

§§ 3.64-3.99 [Reserved]

Subpart E—Risk-Weighted Assets— Internal Ratings-Based and Advanced Measurement Approaches

SOURCE: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§ 3.100 Purpose, applicability, and principle of conservatism.

- (a) Purpose. This subpart E establishes:
- (1) Minimum qualifying criteria for national banks or Federal savings associations using institution-specific internal risk measurement and management processes for calculating riskbased capital requirements; and
- (2) Methodologies for such national banks or Federal savings associations to calculate their total risk-weighted assets.
- (b) Applicability. (1) This subpart applies to a national bank or Federal savings association that:
- (i) Has consolidated total assets, as reported on its most recent year-end Call Report equal to \$250 billion or more:
- (ii) Has consolidated total on-balance sheet foreign exposure on its most recent year-end Call Report equal to \$10 billion or more (where total on-balance sheet foreign exposure equals total cross-border claims less claims with a head office or guarantor located in another country plus redistributed guaranteed amounts to the country of head office or guarantor plus local country claims on local residents plus revaluation gains on foreign exchange and derivative products, calculated in accordance with the Federal Financial Insti-

tutions Examination Council (FFIEC) 009 Country Exposure Report);

- (iii) Is a subsidiary of a depository institution that uses the advanced approaches pursuant to subpart E of 12 CFR part 3 (OCC), 12 CFR part 217 (Board), or 12 CFR part 325 (FDIC) to calculate its total risk-weighted assets;
- (iv) Is a subsidiary of a bank holding company or savings and loan holding company that uses the advanced approaches pursuant to 12 CFR part 217 to calculate its total risk-weighted assets; or
- (v) Elects to use this subpart to calculate its total risk-weighted assets.
- (2) A national bank or Federal savings association that is subject to this subpart shall remain subject to this subpart unless the OCC determines in writing that application of this subpart is not appropriate in light of the national bank's or Federal savings association's asset size, level of complexity, risk profile, or scope of operations. In making a determination under this paragraph (b), the OCC will apply notice and response procedures in the same manner and to the same extent as the notice and response procedures in 12 CFR 3.404.
- (3) A market risk national bank or Federal savings association must exclude from its calculation of risk-weighted assets under this subpart the risk-weighted asset amounts of all covered positions, as defined in subpart F of this part (except foreign exchange positions that are not trading positions, over-the-counter derivative positions, cleared transactions, and unsettled transactions).
- (c) Principle of conservatism. Notwithstanding the requirements of this subpart, a national bank or Federal savings association may choose not to

apply a provision of this subpart to one or more exposures provided that:

- (1) The national bank or Federal savings association can demonstrate on an ongoing basis to the satisfaction of the OCC that not applying the provision would, in all circumstances, unambiguously generate a risk-based capital requirement for each such exposure greater than that which would otherwise be required under this subpart;
- (2) The national bank or Federal savings association appropriately manages the risk of each such exposure;
- (3) The national bank or Federal savings association notifies the OCC in writing prior to applying this principle to each such exposure; and
- (4) The exposures to which the national bank or Federal savings association applies this principle are not, in the aggregate, material to the national bank or Federal savings association.

[78 FR 62157, 62273, 62274, Oct. 11, 2013]

§ 3.101 Definitions.

- (a) Terms that are set forth in §3.2 and used in this subpart have the definitions assigned thereto in §3.2.
- (b) For the purposes of this subpart, the following terms are defined as follows:

Advanced internal ratings-based (IRB) systems means an advanced approaches national bank's or Federal savings association's internal risk rating and segmentation system; risk parameter quantification system; data management and maintenance system; and control, oversight, and validation system for credit risk of wholesale and retail exposures.

Advanced systems means an advanced approaches national bank's or Federal savings association's advanced IRB systems, operational risk management processes, operational risk data and assessment systems, operational risk quantification systems, and, to the extent used by the national bank or Federal savings association, the internal models methodology, advanced CVA approach, double default excessive correlation detection process, and internal models approach (IMA) for equity exposures.

Backtesting means the comparison of a national bank's or Federal savings association's internal estimates with actual outcomes during a sample period not used in model development. In this context, backtesting is one form of out-of-sample testing.

Benchmarking means the comparison of a national bank's or Federal savings association's internal estimates with relevant internal and external data or with estimates based on other estimation techniques.

Bond option contract means a bond option, bond future, or any other instrument linked to a bond that gives rise to similar counterparty credit risk.

Business environment and internal control factors means the indicators of a national bank's or Federal savings association's operational risk profile that reflect a current and forward-looking assessment of the national bank's or Federal savings association's underlying business risk factors and internal control environment.

Credit default swap (CDS) means a financial contract executed under standard industry documentation that allows one party (the protection purchaser) to transfer the credit risk of one or more exposures (reference exposures(s)) to another party (the protection provider) for a certain period of time.

Credit valuation adjustment (CVA) means the fair value adjustment to reflect counterparty credit risk in valuation of OTC derivative contracts.

Default—For the purposes of calculating capital requirements under this subpart:

- (1) *Retail.* (i) A retail exposure of a national bank or Federal savings association is in default if:
- (A) The exposure is 180 days past due, in the case of a residential mortgage exposure or revolving exposure;
- (B) The exposure is 120 days past due, in the case of retail exposures that are not residential mortgage exposures or revolving exposures; or
- (C) The national bank or Federal savings association has taken a full or partial charge-off, write-down of principal, or material negative fair value adjustment of principal on the exposure for credit-related reasons.
- (ii) Notwithstanding paragraph (1)(i) of this definition, for a retail exposure

held by a non-U.S. subsidiary of the national bank or Federal savings association that is subject to an internal ratings-based approach to capital adequacy consistent with the Basel Committee on Banking Supervision's "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" in a non-U.S. jurisdiction, the national bank or Federal savings association may elect to use the definition of default that is used in that jurisdiction, provided that the national bank or Federal savings association has obtained prior approval from the OCC to use the definition of default in that jurisdiction.

(iii) A retail exposure in default remains in default until the national bank or Federal savings association has reasonable assurance of repayment and performance for all contractual principal and interest payments on the exposure.

- (2) Wholesale. (i) A national bank's or Federal savings association's wholesale obligor is in default if:
- (A) The national bank or Federal savings association determines that the obligor is unlikely to pay its credit obligations to the national bank or Federal savings association in full, without recourse by the national bank or Federal savings association to actions such as realizing collateral (if held); or
- (B) The obligor is past due more than 90 days on any material credit obligation(s) to the national bank or Federal savings association.²⁵
- (ii) An obligor in default remains in default until the national bank or Federal savings association has reasonable assurance of repayment and performance for all contractual principal and interest payments on all exposures of the national bank or Federal savings association to the obligor (other than exposures that have been fully writtendown or charged-off).

Dependence means a measure of the association among operational losses across and within units of measure.

Economic downturn conditions means, with respect to an exposure held by the

national bank or Federal savings association, those conditions in which the aggregate default rates for that exposure's wholesale or retail exposure subcategory (or subdivision of such subcategory selected by the national bank or Federal savings association) in the exposure's national jurisdiction (or subdivision of such jurisdiction selected by the national bank or Federal savings association) are significantly higher than average.

Effective maturity (M) of a wholesale exposure means:

- (1) For wholesale exposures other than repo-style transactions, eligible margin loans, and OTC derivative contracts described in paragraph (2) or (3) of this definition:
- (i) The weighted-average remaining maturity (measured in years, whole or fractional) of the expected contractual cash flows from the exposure, using the undiscounted amounts of the cash flows as weights; or
- (ii) The nominal remaining maturity (measured in years, whole or fractional) of the exposure.
- (2) For repo-style transactions, eligible margin loans, and OTC derivative contracts subject to a qualifying master netting agreement for which the national bank or Federal savings association does not apply the internal models approach in section 132(d), the weighted-average remaining maturity (measured in years, whole or fractional) of the individual transactions subject to the qualifying master netting agreement, with the weight of each individual transaction set equal to the notional amount of the transaction.
- (3) For repo-style transactions, eligible margin loans, and OTC derivative contracts for which the national bank or Federal savings association applies the internal models approach in §3.132(d), the value determined in §3.132(d)(4).

Eligible double default guarantor, with respect to a guarantee or credit derivative obtained by a national bank or Federal savings association, means:

(1) *U.S.-based entities*. A depository institution, a bank holding company, a savings and loan holding company, or a securities broker or dealer registered

²⁵Overdrafts are past due once the obligor has breached an advised limit or been advised of a limit smaller than the current outstanding balance.

with the SEC under the Securities Exchange Act, if at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade.

(2) Non-U.S.-based entities. A foreign bank, or a non-U.S.-based securities firm if the national bank or Federal savings association demonstrates that the guarantor is subject to consolidated supervision and regulation comparable to that imposed on U.S. depository institutions, or securities brokerdealers) if at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade.

Eligible operational risk offsets means amounts, not to exceed expected operational loss, that:

- (1) Are generated by internal business practices to absorb highly predictable and reasonably stable operational losses, including reserves calculated consistent with GAAP; and
- (2) Are available to cover expected operational losses with a high degree of certainty over a one-year horizon.

Eligible purchased wholesale exposure means a purchased wholesale exposure that:

- (1) The national bank or Federal savings association or securitization SPE purchased from an unaffiliated seller and did not directly or indirectly originate:
- (2) Was generated on an arm's-length basis between the seller and the obligor (intercompany accounts receivable and receivables subject to contra-accounts between firms that buy and sell to each other do not satisfy this criterion):
- (3) Provides the national bank or Federal savings association or securitization SPE with a claim on all proceeds from the exposure or a pro rata interest in the proceeds from the exposure;
- (4) Has an M of less than one year; and
- (5) When consolidated by obligor, does not represent a concentrated exposure relative to the portfolio of purchased wholesale exposures.

Expected exposure (EE) means the expected value of the probability distribution of non-negative credit risk

exposures to a counterparty at any specified future date before the maturity date of the longest term transaction in the netting set. Any negative fair values in the probability distribution of fair values to a counterparty at a specified future date are set to zero to convert the probability distribution of fair values to the probability distribution of credit risk exposures.

Expected operational loss (EOL) means the expected value of the distribution of potential aggregate operational losses, as generated by the national bank's or Federal savings association's operational risk quantification system using a one-year horizon.

Expected positive exposure (EPE) means the weighted average over time of expected (non-negative) exposures to a counterparty where the weights are the proportion of the time interval that an individual expected exposure represents. When calculating risk-based capital requirements, the average is taken over a one-year horizon.

Exposure at default (EAD) means:

- (1) For the on-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction or eligible margin loan for which the national bank or Federal savings association determines EAD under §3.132, a cleared transaction, or default fund contribution), EAD means the national bank's or Federal savings association's carrying value (including net accrued but unpaid interest and fees) for the exposure or segment less any allocated transfer risk reserve for the exposure or segment.
- (2) For the off-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction or eligible margin loan for which the national bank or Federal savings association determines EAD under §3.132, cleared transaction, or default fund contribution) in the form of a loan commitment, line of credit, trade-related letter of credit, or transaction-related contingency, means the national bank's or Federal savings association's best estimate of net additions to the outstanding

amount owed the national bank or Federal savings association, including estimated future additional draws of principal and accrued but unpaid interest and fees, that are likely to occur over a one-year horizon assuming the wholesale exposure or the retail exposures in the segment were to go into default. This estimate of net additions must reflect what would be expected during economic downturn conditions. For the purposes of this definition:

- (i) Trade-related letters of credit are short-term, self-liquidating instruments that are used to finance the movement of goods and are collateralized by the underlying goods.
- (ii) Transaction-related contingencies relate to a particular transaction and include, among other things, performance bonds and performance-based letters of credit.
- (3) For the off-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction, or eligible margin loan for which the national bank or Federal savings association determines EAD under §3.132, cleared transaction, or default fund contribution) in the form of anything other than a loan commitment, line of credit, trade-related letter of credit, or transaction-related contingency, EAD means the notional amount of the exposure or segment.
- (4) EAD for OTC derivative contracts is calculated as described in §3.132. A national bank or Federal savings association also may determine EAD for repo-style transactions and eligible margin loans as described in §3.132.

Exposure category means any of the wholesale, retail, securitization, or equity exposure categories.

External operational loss event data means, with respect to a national bank or Federal savings association, gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at organizations other than the national bank or Federal savings association.

IMM exposure means a repo-style transaction, eligible margin loan, or OTC derivative for which a national bank or Federal savings association calculates its EAD using the internal models methodology of §3.132(d).

Internal operational loss event data means, with respect to a national bank or Federal savings association, gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at the national bank or Federal savings association.

Loss given default (LGD) means:

- (1) For a wholesale exposure, the greatest of:
- (i) Zero:
- (ii) The national bank's or Federal savings association's empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the national bank or Federal savings association would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned by the national bank or Federal savings association to the exposure) were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; or
- (iii) The national bank's or Federal savings association's empirically based best estimate of the economic loss, per dollar of EAD, the national bank or Federal savings association would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned by the national bank or Federal savings association to the exposure) were to default within a one-year horizon during economic downturn conditions
- (2) For a segment of retail exposures, the greatest of:
 - (i) Zero;
- (ii) The national bank's or Federal savings association's empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the national bank or Federal savings association would expect to incur if the exposures in the segment were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; or
- (iii) The national bank's or Federal savings association's empirically based best estimate of the economic loss, per dollar of EAD, the national bank or Federal savings association would expect to incur if the exposures in the segment were to default within a one-

year horizon during economic downturn conditions.

(3) The economic loss on an exposure in the event of default is all material credit-related losses on the exposure (including accrued but unpaid interest or fees, losses on the sale of collateral, direct workout costs, and an appropriate allocation of indirect workout costs). Where positive or negative cash flows on a wholesale exposure to a defaulted obligor or a defaulted retail exposure (including proceeds from the sale of collateral, workout costs, additional extensions of credit to facilitate repayment of the exposure, and drawdowns of unused credit lines) occur after the date of default, the economic loss must reflect the net present value of cash flows as of the default date using a discount rate appropriate to the risk of the defaulted exposure.

Obligor means the legal entity or natural person contractually obligated on a wholesale exposure, except that a national bank or Federal savings association may treat the following exposures as having separate obligors:

- (1) Exposures to the same legal entity or natural person denominated in different currencies;
- (2)(i) An income-producing real estate exposure for which all or substantially all of the repayment of the exposure is reliant on the cash flows of the real estate serving as collateral for the exposure; the national bank or Federal savings association, in economic substance, does not have recourse to the borrower beyond the real estate collateral; and no cross-default or cross-acceleration clauses are in place other than clauses obtained solely out of an abundance of caution; and
- (ii) Other credit exposures to the same legal entity or natural person; and
- (3)(i) A wholesale exposure authorized under section 364 of the U.S. Bankruptcy Code (11 U.S.C. 364) to a legal entity or natural person who is a debtor-in-possession for purposes of Chapter 11 of the Bankruptcy Code; and
- (ii) Other credit exposures to the same legal entity or natural person.

Operational loss means a loss (excluding insurance or tax effects) resulting from an operational loss event. Operational loss includes all expenses asso-

ciated with an operational loss event except for opportunity costs, forgone revenue, and costs related to risk management and control enhancements implemented to prevent future operational losses.

Operational loss event means an event that results in loss and is associated with any of the following seven operational loss event type categories:

- (1) Internal fraud, which means the operational loss event type category that comprises operational losses resulting from an act involving at least one internal party of a type intended to defraud, misappropriate property, or circumvent regulations, the law, or company policy excluding diversity-and discrimination-type events.
- (2) External fraud, which means the operational loss event type category that comprises operational losses resulting from an act by a third party of a type intended to defraud, misappropriate property, or circumvent the law. Retail credit card losses arising from non-contractual, third-party-initiated fraud (for example, identity theft) are external fraud operational losses. All other third-party-initiated credit losses are to be treated as credit risk losses.
- (3) Employment practices and workplace safety, which means the operational loss event type category that comprises operational losses resulting from an act inconsistent with employment, health, or safety laws or agreements, payment of personal injury claims, or payment arising from diversity- and discrimination-type events.
- (4) Clients, products, and business practices, which means the operational loss event type category that comprises operational losses resulting from the nature or design of a product or from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements).
- (5) Damage to physical assets, which means the operational loss event type category that comprises operational losses resulting from the loss of or damage to physical assets from natural disaster or other events.
- (6) Business disruption and system failures, which means the operational

loss event type category that comprises operational losses resulting from disruption of business or system failures.

(7) Execution, delivery, and process management, which means the operational loss event type category that comprises operational losses resulting from failed transaction processing or process management or losses arising from relations with trade counterparties and vendors.

Operational risk means the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events (including legal risk but excluding strategic and reputational risk).

Operational risk exposure means the 99.9th percentile of the distribution of potential aggregate operational losses, as generated by the national bank's or Federal savings association's operational risk quantification system over a one-year horizon (and not incorporating eligible operational risk offsets or qualifying operational risk mitigants).

Other retail exposure means an exposure (other than a securitization exposure, an equity exposure, a residential mortgage exposure, a pre-sold construction loan, a qualifying revolving exposure, or the residual value portion of a lease exposure) that is managed as part of a segment of exposures with homogeneous risk characteristics, not on an individual-exposure basis, and is either:

- (1) An exposure to an individual for non-business purposes; or
- (2) An exposure to an individual or company for business purposes if the national bank's or Federal savings association's consolidated business credit exposure to the individual or company is \$1 million or less.

Probability of default (PD) means:

(1) For a wholesale exposure to a non-defaulted obligor, the national bank's or Federal savings association's empirically based best estimate of the long-run average one-year default rate for the rating grade assigned by the national bank or Federal savings association to the obligor, capturing the average default experience for obligors in the rating grade over a mix of economic conditions (including economic

downturn conditions) sufficient to provide a reasonable estimate of the average one-year default rate over the economic cycle for the rating grade.

§ 3.101

- (2) For a segment of non-defaulted retail exposures, the national bank's or Federal savings association's empirically based best estimate of the longrun average one-year default rate for the exposures in the segment, capturing the average default experience for exposures in the segment over a mix of economic conditions (including economic downturn conditions) sufficient to provide a reasonable estimate of the average one-year default rate over the economic cycle for the segment.
- (3) For a wholesale exposure to a defaulted obligor or segment of defaulted retail exposures, 100 percent.

Qualifying cross-product master netting agreement means a qualifying master netting agreement that provides for termination and close-out netting across multiple types of financial transactions or qualifying master netting agreements in the event of a counterparty's default, provided that the underlying financial transactions are OTC derivative contracts, eligible margin loans, or repo-style transactions. In order to treat an agreement as a qualifying cross-product master netting agreement for purposes of this subpart, a national bank or Federal savings association must comply with the requirements of §3.3(c) of this part with respect to that agreement.

Qualifying revolving exposure (QRE) means an exposure (other than a securitization exposure or equity exposure) to an individual that is managed as part of a segment of exposures with homogeneous risk characteristics, not on an individual-exposure basis, and:

- (1) Is revolving (that is, the amount outstanding fluctuates, determined largely by a borrower's decision to borrow and repay up to a pre-established maximum amount, except for an outstanding amount that the borrower is required to pay in full every month);
- (2) Is unsecured and unconditionally cancelable by the national bank or Federal savings association to the fullest extent permitted by Federal law; and

- (3)(i) Has a maximum contractual exposure amount (drawn plus undrawn) of up to \$100.000; or
- (ii) With respect to a product with an outstanding amount that the borrower is required to pay in full every month, the total outstanding amount does not in practice exceed \$100,000.
- (4) A segment of exposures that contains one or more exposures that fails to meet paragraph (3)(ii) of this definition must be treated as a segment of other retail exposures for the 24 month period following the month in which the total outstanding amount of one or more exposures individually exceeds \$100,000.

Retail exposure means a residential mortgage exposure, a qualifying revolving exposure, or an other retail exposure.

Retail exposure subcategory means the residential mortgage exposure, qualifying revolving exposure, or other retail exposure subcategory.

Risk parameter means a variable used in determining risk-based capital requirements for wholesale and retail exposures, specifically probability of default (PD), loss given default (LGD), exposure at default (EAD), or effective maturity (M).

Scenario analysis means a systematic process of obtaining expert opinions from business managers and risk management experts to derive reasoned assessments of the likelihood and loss impact of plausible high-severity operational losses. Scenario analysis may include the well-reasoned evaluation and use of external operational loss event data, adjusted as appropriate to ensure relevance to a national bank's or Federal savings association's operational risk profile and control structure.

Total wholesale and retail risk-weighted assets means the sum of:

- (1) Risk-weighted assets for wholesale exposures that are not IMM exposures, cleared transactions, or default fund contributions to non-defaulted obligors and segments of non-defaulted retail exposures;
- (2) Risk-weighted assets for wholesale exposures to defaulted obligors and segments of defaulted retail exposures;

- (3) Risk-weighted assets for assets not defined by an exposure category;
- (4) Risk-weighted assets for non-material portfolios of exposures;
- (5) Risk-weighted assets for IMM exposures (as determined in §3.132(d)):
- (6) Risk-weighted assets for cleared transactions and risk-weighted assets for default fund contributions (as determined in §3.133); and
- (7) Risk-weighted assets for unsettled transactions (as determined in §3.136).

Unexpected operational loss (UOL) means the difference between the national bank's or Federal savings association's operational risk exposure and the national bank's or Federal savings association's expected operational loss.

Unit of measure means the level (for example, organizational unit or operational loss event type) at which the national bank's or Federal savings association's operational risk quantification system generates a separate distribution of potential operational losses.

Wholesale exposure means a credit exposure to a company, natural person, sovereign, or governmental entity (other than a securitization exposure, retail exposure, pre-sold construction loan, or equity exposure).

Wholesale exposure subcategory means the HVCRE or non-HVCRE wholesale exposure subcategory.

QUALIFICATION

$\S 3.121$ Qualification process.

- (a) Timing. (1) A national bank or Federal savings association that is described in $\S 3.100(b)(1)(i)$ through (iv) must adopt a written implementation plan no later than six months after the date the national bank or Federal savings association meets a criterion in that section. The implementation plan must incorporate an explicit start date no later than 36 months after the date the national bank or Federal savings association meets at least one criterion under $\S 3.100(b)(1)(i)$ through (iv). The OCC may extend the start date.
- (2) A national bank or Federal savings association that elects to be subject to this appendix under §3.100(b)(1)(v) must adopt a written implementation plan.

- (b) Implementation plan. (1) The national bank's or Federal savings association's implementation plan must address in detail how the national bank or Federal savings association complies, or plans to comply, with the qualification requirements in §3.122. The national bank or Federal savings association also must maintain a comprehensive and sound planning and governance process to oversee the implementation efforts described in the plan. At a minimum, the plan must:
- (i) Comprehensively address the qualification requirements in §3.122 for the national bank or Federal savings association and each consolidated subsidiary (U.S. and foreign-based) of the national bank or Federal savings association with respect to all portfolios and exposures of the national bank or Federal savings association and each of its consolidated subsidiaries;
- (ii) Justify and support any proposed temporary or permanent exclusion of business lines, portfolios, or exposures from the application of the advanced approaches in this subpart (which business lines, portfolios, and exposures must be, in the aggregate, immaterial to the national bank or Federal savings association):
- (iii) Include the national bank's or Federal savings association's self-assessment of:
- (A) The national bank's or Federal savings association's current status in meeting the qualification requirements in §3.122: and
- (B) The consistency of the national bank's or Federal savings association's current practices with the OCC's supervisory guidance on the qualification requirements;
- (iv) Based on the national bank's or Federal savings association's self-assessment, identify and describe the areas in which the national bank or Federal savings association proposes to undertake additional work to comply with the qualification requirements in §3.122 or to improve the consistency of the national bank's or Federal savings association's current practices with the OCC's supervisory guidance on the qualification requirements (gap analysis);
- (v) Describe what specific actions the national bank or Federal savings asso-

- ciation will take to address the areas identified in the gap analysis required by paragraph (b)(1)(iv) of this section;
- (vi) Identify objective, measurable milestones, including delivery dates and a date when the national bank's or Federal savings association's implementation of the methodologies described in this subpart will be fully operational;
- (vii) Describe resources that have been budgeted and are available to implement the plan; and
- (viii) Receive approval of the national bank's or Federal savings association's board of directors.
- (2) The national bank or Federal savings association must submit the implementation plan, together with a copy of the minutes of the board of directors' approval, to the OCC at least 60 days before the national bank or Federal savings association proposes to begin its parallel run, unless the OCC waives prior notice.
- (c) Parallel run. Before determining its risk-weighted assets under this subpart and following adoption of the implementation plan, the national bank or Federal savings association must conduct a satisfactory parallel run. A satisfactory parallel run is a period of no less than four consecutive calendar quarters during which the national bank or Federal savings association complies with the qualification requirements in §3.122 to the satisfaction of the OCC. During the parallel run, the national bank or Federal savings association must report to the OCC on a calendar quarterly basis its riskbased capital ratios determined in accordance with §3.10(b)(1) through (3) and \S ???10.(c)(1) through (3). During this period, the national bank's or Federal savings association's minimum risk-based capital ratios are determined as set forth in subpart D of this part.
- (d) Approval to calculate risk-based capital requirements under this subpart. The OCC will notify the national bank or Federal savings association of the date that the national bank or Federal savings association must begin to use this subpart for purposes of §3.10 if the OCC determines that:
- (1) The national bank or Federal savings association fully complies with all

the qualification requirements is §3.122;

- (2) The national bank or Federal savings association has conducted a satisfactory parallel run under paragraph (c) of this section; and
- (3) The national bank or Federal savings association has an adequate process to ensure ongoing compliance with the qualification requirements in §3.122.

§ 3.122 Qualification requirements.

- (a) Process and systems requirements. (1) A national bank or Federal savings association must have a rigorous process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.
- (2) The systems and processes used by a national bank or Federal savings association for risk-based capital purposes under this subpart must be consistent with the national bank's or Federal savings association's internal risk management processes and management information reporting systems.
- (3) Each national bank or Federal savings association must have an appropriate infrastructure with risk measurement and management processes that meet the qualification requirements of this section and are appropriate given the national bank's or Federal savings association's size and level of complexity. Regardless of whether the systems and models that generate the risk parameters necessary for calculating a national bank's or Federal savings association's riskbased capital requirements are located at any affiliate of the national bank or Federal savings association, the national bank or Federal savings association itself must ensure that the risk parameters and reference data used to determine its risk-based capital requirements are representative of its own credit risk and operational risk exposures.
- (b) Risk rating and segmentation systems for wholesale and retail exposures.
 (1) A national bank or Federal savings association must have an internal risk rating and segmentation system that accurately and reliably differentiates among degrees of credit risk for the na-

tional bank's or Federal savings association's wholesale and retail exposures.

- (2) For wholesale exposures:
- (i) A national bank or Federal savings association must have an internal risk rating system that accurately and reliably assigns each obligor to a single rating grade (reflecting the obligor's likelihood of default). A national bank or Federal savings association may elect, however, not to assign to a rating grade an obligor to whom the national bank or Federal savings association extends credit based solely on the financial strength of a guarantor, provided that all of the national bank's or Federal savings association's exposures to the obligor are fully covered by eligible guarantees, the national bank or Federal savings association applies the PD substitution approach in §3.134(c)(1) to all exposures to that obligor, and the national bank or Federal savings association immediately assigns the obligor to a rating grade if a guarantee can no longer be recognized under this part. The national bank's or Federal savings association's wholesale obligor rating system must have at least seven discrete rating grades for non-defaulted obligors and at least one rating grade for defaulted obligors.
- (ii) Unless the national bank or Federal savings association has chosen to directly assign LGD estimates to each wholesale exposure, the national bank or Federal savings association must have an internal risk rating system that accurately and reliably assigns each wholesale exposure to a loss severity rating grade (reflecting the national bank's or Federal savings association's estimate of the LGD of the exposure). A national bank or Federal savings association employing loss severity rating grades must have a sufficiently granular loss severity grading system to avoid grouping together exposures with widely ranging LGDs.
- (3) For retail exposures, a national bank or Federal savings association must have an internal system that groups retail exposures into the appropriate retail exposure subcategory, groups the retail exposures in each retail exposure subcategory into separate segments with homogeneous risk characteristics, and assigns accurate and

reliable PD and LGD estimates for each segment on a consistent basis. The national bank's or Federal savings association's system must identify and group in separate segments by subcategories exposures identified in §3.131(c)(2)(ii) and (iii).

- (4) The national bank's or Federal savings association's internal risk rating policy for wholesale exposures must describe the national bank's or Federal savings association's rating philosophy (that is, must describe how wholesale obligor rating assignments are affected by the national bank's or Federal savings association's choice of the range of economic, business, and industry conditions that are considered in the obligor rating process).
- (5) The national bank's or Federal savings association's internal risk rating system for wholesale exposures must provide for the review and update (as appropriate) of each obligor rating and (if applicable) each loss severity rating whenever the national bank or Federal savings association receives new material information, but no less frequently than annually. The national bank's or Federal savings association's retail exposure segmentation system must provide for the review and update (as appropriate) of assignments of retail exposures to segments whenever the national bank or Federal savings association receives new material information, but generally no less frequently than quarterly.
- (c) Quantification of risk parameters for wholesale and retail exposures. (1) The national bank or Federal savings association must have a comprehensive risk parameter quantification process that produces accurate, timely, and reliable estimates of the risk parameters for the national bank's or Federal savings association's wholesale and retail exposures.
- (2) Data used to estimate the risk parameters must be relevant to the national bank's or Federal savings association's actual wholesale and retail exposures, and of sufficient quality to support the determination of risk-based capital requirements for the exposures.
- (3) The national bank's or Federal savings association's risk parameter quantification process must produce

- appropriately conservative risk parameter estimates where the national bank or Federal savings association has limited relevant data, and any adjustments that are part of the quantification process must not result in a pattern of bias toward lower risk parameter estimates.
- (4) The national bank's or Federal savings association's risk parameter estimation process should not rely on the possibility of U.S. government financial assistance, except for the financial assistance that the U.S. government has a legally binding commitment to provide.
- (5) Where the national bank's or Federal savings association's quantifications of LGD directly or indirectly incorporate estimates of the effectiveness of its credit risk management practices in reducing its exposure to troubled obligors prior to default, the national bank or Federal savings association must support such estimates with empirical analysis showing that the estimates are consistent with its historical experience in dealing with such exposures during economic downturn conditions.
- (6) PD estimates for wholesale obligors and retail segments must be based on at least five years of default data. LGD estimates for wholesale exposures must be based on at least seven years of loss severity data, and LGD estimates for retail segments must be based on at least five years of loss severity data. EAD estimates for wholesale exposures must be based on at least seven years of exposure amount data, and EAD estimates for retail segments must be based on at least five years of exposure amount data.
- (7) Default, loss severity, and exposure amount data must include periods of economic downturn conditions, or the national bank or Federal savings association must adjust its estimates of risk parameters to compensate for the lack of data from periods of economic downturn conditions.
- (8) The national bank's or Federal savings association's PD, LGD, and EAD estimates must be based on the definition of default in §3.101.

- (9) The national bank or Federal savings association must review and update (as appropriate) its risk parameters and its risk parameter quantification process at least annually.
- (10) The national bank or Federal savings association must, at least annually, conduct a comprehensive review and analysis of reference data to determine relevance of reference data to the national bank's or Federal savings association's exposures, quality of reference data to support PD, LGD, and EAD estimates, and consistency of reference data to the definition of default in §3.101.
- (d) Counterparty credit risk model. A national bank or Federal savings association must obtain the prior written approval of the OCC under §3.132 to use the internal models methodology for counterparty credit risk and the advanced CVA approach for the CVA capital requirement.
- (e) Double default treatment. A national bank or Federal savings association must obtain the prior written approval of the OCC under §3.135 to use the double default treatment.
- (f) Equity exposures model. A national bank or Federal savings association must obtain the prior written approval of the OCC under §3.153 to use the internal models approach for equity exposures.
- (g) Operational risk. (1) Operational risk management processes. A national bank or Federal savings association must:
- (i) Have an operational risk management function that:
- (A) Is independent of business line management; and
- (B) Is responsible for designing, implementing, and overseeing the national bank's or Federal savings association's operational risk data and assessment systems, operational risk quantification systems, and related processes;
- (ii) Have and document a process (which must capture business environment and internal control factors affecting the national bank's or Federal savings association's operational risk profile) to identify, measure, monitor, and control operational risk in the national bank's or Federal savings asso-

- ciation's products, activities, processes, and systems; and
- (iii) Report operational risk exposures, operational loss events, and other relevant operational risk information to business unit management, senior management, and the board of directors (or a designated committee of the board).
- (2) Operational risk data and assessment systems. A national bank or Federal savings association must have operational risk data and assessment systems that capture operational risks to which the national bank or Federal savings association is exposed. The national bank's or Federal savings association's operational risk data and assessment systems must:
- (i) Be structured in a manner consistent with the national bank's or Federal savings association's current business activities, risk profile, technological processes, and risk management processes; and
- (ii) Include credible, transparent, systematic, and verifiable processes that incorporate the following elements on an ongoing basis:
- (A) Internal operational loss event data. The national bank or Federal savings association must have a systematic process for capturing and using internal operational loss event data in its operational risk data and assessment systems.
- (1) The national bank's or Federal savings association's operational risk data and assessment systems must include a historical observation period of at least five years for internal operational loss event data (or such shorter period approved by the OCC to address transitional situations, such as integrating a new business line).
- (2) The national bank or Federal savings association must be able to map its internal operational loss event data into the seven operational loss event type categories.
- (3) The national bank or Federal savings association may refrain from collecting internal operational loss event data for individual operational losses below established dollar threshold amounts if the national bank or Federal savings association can demonstrate to the satisfaction of the OCC that the thresholds are reasonable, do

not exclude important internal operational loss event data, and permit the national bank or Federal savings association to capture substantially all the dollar value of the national bank's or Federal savings association's operational losses.

- (B) External operational loss event data. The national bank or Federal savings association must have a systematic process for determining its methodologies for incorporating external operational loss event data into its operational risk data and assessment systems.
- (C) Scenario analysis. The national bank or Federal savings association must have a systematic process for determining its methodologies for incorporating scenario analysis into its operational risk data and assessment systems.
- (D) Business environment and internal control factors. The national bank or Federal savings association must incorporate business environment and internal control factors into its operational risk data and assessment systems. The national bank or Federal savings association must also periodically compare the results of its prior business environment and internal control factor assessments against its actual operational losses incurred in the intervening period.
- (3) Operational risk quantification systems. (i) The national bank's or Federal savings association's operational risk quantification systems:
- (A) Must generate estimates of the national bank's or Federal savings association's operational risk exposure using its operational risk data and assessment systems;
- (B) Must employ a unit of measure that is appropriate for the national bank's or Federal savings association's range of business activities and the variety of operational loss events to which it is exposed, and that does not combine business activities or operational loss events with demonstrably different risk profiles within the same loss distribution:
- (C) Must include a credible, transparent, systematic, and verifiable approach for weighting each of the four elements, described in paragraph (g)(2)(ii) of this section, that a national

bank or Federal savings association is required to incorporate into its operational risk data and assessment systems:

- (D) May use internal estimates of dependence among operational losses across and within units of measure if the national bank or Federal savings association can demonstrate to the satisfaction of the OCC that its process for estimating dependence is sound, robust to a variety of scenarios, and implemented with integrity, and allows for uncertainty surrounding the estimates. If the national bank or Federal savings association has not made such a demonstration, it must sum operational risk exposure estimates across units of measure to calculate its total operational risk exposure; and
- (E) Must be reviewed and updated (as appropriate) whenever the national bank or Federal savings association becomes aware of information that may have a material effect on the national bank's or Federal savings association's estimate of operational risk exposure, but the review and update must occur no less frequently than annually.
- (ii) With the prior written approval of the OCC, a national bank or Federal savings association may generate an estimate of its operational risk exposure using an alternative approach to that specified in paragraph (g)(3)(i) of this section. A national bank or Federal savings association proposing to use such an alternative operational risk quantification system must submit a proposal to the OCC. In determining whether to approve a national bank's or Federal savings association's proposal to use an alternative operational risk quantification system, the OCC will consider the following principles:
- (A) Use of the alternative operational risk quantification system will be allowed only on an exception basis, considering the size, complexity, and risk profile of the national bank or Federal savings association;
- (B) The national bank or Federal savings association must demonstrate that its estimate of its operational risk exposure generated under the alternative operational risk quantification system is appropriate and can be supported empirically; and

- (C) A national bank or Federal savings association must not use an allocation of operational risk capital requirements that includes entities other than depository institutions or the benefits of diversification across entities.
- (h) Data management and maintenance. (1) A national bank or Federal savings association must have data management and maintenance systems that adequately support all aspects of its advanced systems and the timely and accurate reporting of risk-based capital requirements.
- (2) A national bank or Federal savings association must retain data using an electronic format that allows timely retrieval of data for analysis, validation, reporting, and disclosure purposes.
- (3) A national bank or Federal savings association must retain sufficient data elements related to key risk drivers to permit adequate monitoring, validation, and refinement of its advanced systems.
- (i) Control, oversight, and validation mechanisms. (1) The national bank's or Federal savings association's senior management must ensure that all components of the national bank's or Federal savings association's advanced systems function effectively and comply with the qualification requirements in this section.
- (2) The national bank's or Federal savings association's board of directors (or a designated committee of the board) must at least annually review the effectiveness of, and approve, the national bank's or Federal savings association's advanced systems.
- (3) A national bank or Federal savings association must have an effective system of controls and oversight that:
- (i) Ensures ongoing compliance with the qualification requirements in this section:
- (ii) Maintains the integrity, reliability, and accuracy of the national bank's or Federal savings association's advanced systems; and
- (iii) Includes adequate governance and project management processes.
- (4) The national bank or Federal savings association must validate, on an ongoing basis, its advanced systems. The national bank's or Federal savings

- association's validation process must be independent of the advanced systems' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:
- (i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the advanced systems:
- (ii) An ongoing monitoring process that includes verification of processes and benchmarking; and
- (iii) An outcomes analysis process that includes backtesting.
- (5) The national bank or Federal savings association must have an internal audit function independent of businessline management that at least annually assesses the effectiveness of the controls supporting the national bank's or Federal savings association's advanced systems and reports its findings to the national bank's or Federal savings association's board of directors (or a committee thereof).
- (6) The national bank or Federal savings association must periodically stress test its advanced systems. The stress testing must include a consideration of how economic cycles, especially downturns, affect risk-based capital requirements (including migration across rating grades and segments and the credit risk mitigation benefits of double default treatment).
- (j) Documentation. The national bank or Federal savings association must adequately document all material aspects of its advanced systems.

§3.123 Ongoing qualification.

(a) Changes to advanced systems. A national bank or Federal savings association must meet all the qualification requirements in §3.122 on an ongoing basis. A national bank or Federal savings association must notify the OCC when the national bank or Federal savings association makes any change to an advanced system that would result in a material change in the national bank's or Federal savings association's advanced approaches total risk-weighted asset amount for an exposure type or when the national bank or Federal

savings association makes any significant change to its modeling assumptions.

- (b) Failure to comply with qualification requirements. (1) If the OCC determines that a national bank or Federal savings association that uses this subpart and that has conducted a satisfactory parallel run fails to comply with the qualification requirements in §3.122, the OCC will notify the national bank or Federal savings association in writing of the national bank's or Federal savings association's failure to comply.
- (2) The national bank or Federal savings association must establish and submit a plan satisfactory to the OCC to return to compliance with the qualification requirements.
- (3) In addition, if the OCC determines that the national bank's or Federal savings association's advanced approaches total risk-weighted assets are not commensurate with the national bank's or Federal savings association's credit, market, operational, or other risks, the OCC may require such a national bank or Federal savings association to calculate its advanced approaches total risk-weighted assets with any modifications provided by the OCC.

§ 3.124 Merger and acquisition transitional arrangements.

(a) Mergers and acquisitions of companies without advanced systems. If a national bank or Federal savings association merges with or acquires a company that does not calculate its riskbased capital requirements using advanced systems, the national bank or Federal savings association may use subpart D of this part to determine the risk-weighted asset amounts for the merged or acquired company's exposures for up to 24 months after the calendar quarter during which the merger or acquisition consummates. The OCC may extend this transition period for up to an additional 12 months. Within 90 days of consummating the merger or acquisition, the national bank or Federal savings association must submit to the OCC an implementation plan for using its advanced systems for the acquired company. During the period in which subpart D of this part applies to the merged or acquired company, any

ALLL, net of allocated transfer risk reserves established pursuant to 12 U.S.C. 3904, associated with the merged or acquired company's exposures may be included in the acquiring national bank's or Federal savings association's tier 2 capital up to 1.25 percent of the acquired company's risk-weighted assets. All general allowances of the merged or acquired company must be excluded from the national bank's or Federal savings association's eligible credit reserves. In addition, the risk-weighted assets of the merged or acquired company are not included in the national bank's or Federal savings association's credit-risk-weighted assets but are included in total risk-weighted assets. If a national bank or Federal savings association relies on this paragraph (a), the national bank or Federal savings association must disclose publicly the amounts of risk-weighted assets and qualifying capital calculated under this subpart for the acquiring national bank or Federal savings association and under subpart D of this part for the acquired company.

(b) Mergers and acquisitions of companies with advanced systems. (1) If a national bank or Federal savings association merges with or acquires a company that calculates its risk-based capital requirements using advanced systems, the national bank or Federal savings association may use the acquired company's advanced systems to determine total risk-weighted assets for the merged or acquired company's exposures for up to 24 months after the calendar quarter during which the acquisition or merger consummates. The OCC may extend this transition period for up to an additional 12 months. Within 90 days of consummating the merger or acquisition, the national bank or Federal savings association must submit to the OCC an implementation plan for using its advanced systems for the merged or acquired company.

(2) If the acquiring national bank or Federal savings association is not subject to the advanced approaches in this subpart at the time of acquisition or merger, during the period when subpart D of this part applies to the acquiring national bank or Federal savings association, the ALLL associated with the

§§ 3.125-3.130

exposures of the merged or acquired company may not be directly included in tier 2 capital. Rather, any excess eligible credit reserves associated with the merged or acquired company's exposures may be included in the national bank's or Federal savings association's tier 2 capital up to 0.6 percent of the credit-risk-weighted assets associated with those exposures.

§§ 3.125-3.130 [Reserved]

RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

§ 3.131 Mechanics for calculating total wholesale and retail risk-weighted assets.

- (a) Overview. A national bank or Federal savings association must calculate its total wholesale and retail risk-weighted asset amount in four distinct phases:
- (1) Phase 1—categorization of exposures:
- (2) Phase 2—assignment of wholesale obligors and exposures to rating grades and segmentation of retail exposures;
- (3) Phase 3—assignment of risk parameters to wholesale exposures and segments of retail exposures; and
- (4) Phase 4—calculation of risk-weighted asset amounts.
- (b) Phase 1—Categorization. The national bank or Federal savings association must determine which of its exposures are wholesale exposures, retail exposures, securitization exposures, or equity exposures. The national bank or Federal savings association must categorize each retail exposure as a residential mortgage exposure, a QRE, or an other retail exposure. The national bank or Federal savings association must identify which wholesale exposures are HVCRE exposures, sovereign exposures, OTC derivative contracts, repo-style transactions, eligible margin loans, eligible purchased wholesale exposures, cleared transactions, default fund contributions, unsettled transactions to which §3.136 applies, and eligible guarantees or eligible credit derivatives that are used as credit risk mitigants. The national bank or Federal savings association must identify any on-balance sheet asset that does not meet the definition of a wholesale, retail, equity, or securitization expo-

sure, as well as any non-material portfolio of exposures described in paragraph (e)(4) of this section.

- (c) Phase 2—Assignment of wholesale obligors and exposures to rating grades and retail exposures to segments—(1) Assignment of wholesale obligors and exposures to rating grades.
- (i) The national bank or Federal savings association must assign each obligor of a wholesale exposure to a single obligor rating grade and must assign each wholesale exposure to which it does not directly assign an LGD estimate to a loss severity rating grade.
- (ii) The national bank or Federal savings association must identify which of its wholesale obligors are in default.
- (2) Segmentation of retail exposures. (i) The national bank or Federal savings association must group the retail exposures in each retail subcategory into segments that have homogeneous risk characteristics.
- (ii) The national bank or Federal savings association must identify which of its retail exposures are in default. The national bank or Federal savings association must segment defaulted retail exposures separately from non-defaulted retail exposures.
- (iii) If the national bank or Federal savings association determines the EAD for eligible margin loans using the approach in §3.132(b), the national bank or Federal savings association must identify which of its retail exposures are eligible margin loans for which the national bank or Federal savings association uses this EAD approach and must segment such eligible margin loans separately from other retail exposures.
- (3) Eligible purchased wholesale exposures. A national bank or Federal savings association may group its eligible purchased wholesale exposures into segments that have homogeneous risk characteristics. A national bank or Federal savings association must use the wholesale exposure formula in Table 1 of this section to determine the risk-based capital requirement for each segment of eligible purchased wholesale exposures.
- (d) Phase 3—Assignment of risk parameters to wholesale exposures and segments of retail exposures. (1) Quantification process. Subject to the limitations in

this paragraph (d), the national bank or Federal savings association must:

- (i) Associate a PD with each wholesale obligor rating grade;
- (ii) Associate an LGD with each wholesale loss severity rating grade or assign an LGD to each wholesale exposure;
- (iii) Assign an EAD and M to each wholesale exposure; and
- (iv) Assign a PD, LGD, and EAD to each segment of retail exposures.
- (2) Floor on PD assignment. The PD for each wholesale obligor or retail segment may not be less than 0.03 percent, except for exposures to or directly and unconditionally guaranteed by a sovereign entity, the Bank for International Settlements. the International Monetary Fund, the European Commission, the European Central Bank, or a multilateral development bank, to which the national bank or Federal savings association assigns a rating grade associated with a PD of less than 0.03 percent.
- (3) Floor on LGD estimation. The LGD for each segment of residential mortgage exposures may not be less than 10 percent, except for segments of residential mortgage exposures for which all or substantially all of the principal of each exposure is either:
- (i) Directly and unconditionally guaranteed by the full faith and credit of a sovereign entity; or
- (ii) Guaranteed by a contingent obligation of the U.S. government or its agencies, the enforceability of which is dependent upon some affirmative action on the part of the beneficiary of the guarantee or a third party (for example, meeting servicing requirements).
- (4) Eligible purchased wholesale exposures. A national bank or Federal savings association must assign a PD, LGD, EAD, and M to each segment of eligible purchased wholesale exposures. If the national bank or Federal savings association can estimate ECL (but not PD or LGD) for a segment of eligible purchased wholesale exposures, the national bank or Federal savings association must assume that the LGD of the segment equals 100 percent and that the PD of the segment equals ECL divided by EAD. The estimated ECL must be calculated for the exposures

without regard to any assumption of recourse or guarantees from the seller or other parties.

- (5) Credit risk mitigation: credit derivatives, guarantees, and collateral. (i) A national bank or Federal savings association may take into account the risk reducing effects of eligible guarantees and eligible credit derivatives in support of a wholesale exposure by applying the PD substitution or LGD adjustment treatment to the exposure as provided in §3.134 or, if applicable, applying double default treatment to the exposure as provided in §3.135. A national bank or Federal savings association may decide separately for each wholesale exposure that qualifies for the double default treatment under §3.135 whether to apply the double default treatment or to use the PD substitution or LGD adjustment treatment without recognizing double default effects.
- (ii) A national bank or Federal savings association may take into account the risk reducing effects of guarantees and credit derivatives in support of retail exposures in a segment when quantifying the PD and LGD of the segment.
- (iii) Except as provided in paragraph (d)(6) of this section, a national bank or Federal savings association may take into account the risk reducing effects of collateral in support of a wholesale exposure when quantifying the LGD of the exposure, and may take into account the risk reducing effects of collateral in support of retail exposures when quantifying the PD and LGD of the segment.
- (6) EAD for OTC derivative contracts, repo-style transactions, and eligible margin loans. A national bank or Federal savings association must calculate its EAD for an OTC derivative contract as provided in §3.132 (c) and (d). A national bank or Federal savings association may take into account the risk-reducing effects of financial collateral in support of a repo-style transaction or eligible margin loan and of any collateral in support of a repo-style transaction that is included in the national bank's or Federal savings association's VaR-based measure under subpart F of this part through an adjustment to EAD as provided in §3.132(b) and (d). A

national bank or Federal savings association that takes collateral into account through such an adjustment to EAD under §3.132 may not reflect such collateral in LGD.

- (7) Effective maturity. An exposure's M must be no greater than five years and no less than one year, except that an exposure's M must be no less than one day if the exposure is a trade related letter of credit, or if the exposure has an original maturity of less than one year and is not part of a national bank's or Federal savings association's ongoing financing of the obligor. An exposure is not part of a national bank's or Federal savings association's ongoing financing of the obligor if the national bank or Federal savings association:
- (i) Has a legal and practical ability not to renew or roll over the exposure in the event of credit deterioration of the obligor;
- (ii) Makes an independent credit decision at the inception of the exposure and at every renewal or roll over; and
- (iii) Has no substantial commercial incentive to continue its credit relationship with the obligor in the event of credit deterioration of the obligor.
- (8) EAD for exposures to certain central counterparties. A national bank or Federal savings association may attribute an EAD of zero to exposures that arise from the settlement of cash transactions (such as equities, fixed income, spot foreign exchange, and spot com-

modities) with a central counterparty where there is no assumption of ongoing counterparty credit risk by the central counterparty after settlement of the trade and associated default fund contributions.

(e) Phase 4—Calculation of risk-weighted assets—(1) Non-defaulted exposures. (i) A national bank or Federal savings association must calculate the dollar risk-based capital requirement for each of its wholesale exposures to a non-defaulted obligor (except for eligible guarantees and eligible credit derivatives that hedge another wholesale exposure, IMM exposures, cleared transactions, default fund contributions, unsettled transactions, and exposures to which the national bank or Federal savings association applies the double default treatment in §3.135) and segments of non-defaulted retail exposures by inserting the assigned risk parameters for the wholesale obligor and exposure or retail segment into the appropriate risk-based capital formula specified in Table 1 and multiplying the output of the formula (K) by the EAD of the exposure or segment. Alternatively, a national bank or Federal savings association may apply a 300 percent risk weight to the EAD of an eligible margin loan if the national bank or Federal savings association is not able to meet the OCC's requirements for estimation of PD and LGD for the margin loan.

Comptroller of the Currency, Treasury

§3.131

Table 1 to \S _.131 – IRB Risk-Based Capital Formulas for Wholesale Exposures TO NON-DEFAULTED OBLIGORS AND SEGMENTS OF NON-DEFAULTED RETAIL EXPOSURES 1

Capital

$$K = \left[LGD \times N \left(\frac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1 - R}} \right) - \left(LGD \times PD \right) \right]$$

Requirement

(K)

Non-

Retail

Defaulted

Exposures

Correlation

For residential mortgage exposures: R = 0.15

Factor (R)

For qualifying revolving exposures: R = 0.04

For other retail exposures: $R = 0.03 + 0.13 \times e^{-35 \times PD}$

Capital

Requirement

$$K = \left[LGD \times N \left(\frac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1 - R}} \right) - \left(LGD \times PD \right) \right] \times \left(\frac{1 + (M - 2.5) \times b}{1 - 1.5 \times b} \right)$$

(K)

Non-

Wholesale

Defaulted

Exposures

Correlation

For HVCRE exposures:

Factor (R)

$$R = 0.12 + 0.18 \times e^{-50 \times PD}$$

For wholesale exposures to unregulated financial institutions:

§3.131

$$R = 1.25 \times (0.12 + 0.12 \times e^{-50 \times PD})$$

For wholesale exposures to regulated financial institutions with total assets greater than or equal to \$100 billion:

$$R = 1.25 \times (0.12 + 0.12 \times e^{-50 \times PD})$$

For wholesale exposures other than HVCRE exposures, unregulated financial institutions, and regulated financial institutions with total assets greater than or equal to \$100 billion:

$$R = 0.12 + 0.12 \times e^{-50 \times PD}$$

Maturity

$$b = (0.11852 - 0.05478 \times \ln(PD))^{2}$$

Adjustment

(b)

 $^{1}N(.)$ means the cumulative distribution function for a standard normal random variable. $N^{-1}(.)$ means the inverse cumulative distribution function for a standard normal random variable. The symbol e refers to the base of the natural logarithms, and the function ln(.) refers to the natural logarithm of the expression within parentheses. The formulas apply when PD is greater than zero. If PD equals zero, the capital requirement K is set equal to zero.

- (ii) The sum of all the dollar risk-based capital requirements for each wholesale exposure to a non-defaulted obligor and segment of non-defaulted retail exposures calculated in paragraph (e)(1)(i) of this section and in §3.135(e) equals the total dollar risk-based capital requirement for those exposures and segments.
- (iii) The aggregate risk-weighted asset amount for wholesale exposures to non-defaulted obligors and segments of non-defaulted retail exposures equals the total dollar risk-based capital requirement in paragraph (e)(1)(ii) of this section multiplied by 12.5.
- (2) Wholesale exposures to defaulted obligors and segments of defaulted retail exposures—(i) Not covered by an eligible
- U.S. government guarantee: The dollar risk-based capital requirement for each wholesale exposure not covered by an eligible guarantee from the U.S. government to a defaulted obligor and each segment of defaulted retail exposures not covered by an eligible guarantee from the U.S. government equals 0.08 multiplied by the EAD of the exposure or segment.
- (ii) Covered by an eligible U.S. government guarantee: The dollar risk-based capital requirement for each wholesale exposure to a defaulted obligor covered by an eligible guarantee from the U.S. government and each segment of defaulted retail exposures covered by an eligible guarantee from the U.S. government equals the sum of:

- (A) The sum of the EAD of the portion of each wholesale exposure to a defaulted obligor covered by an eligible guarantee from the U.S. government plus the EAD of the portion of each segment of defaulted retail exposures that is covered by an eligible guarantee from the U.S. government and the resulting sum is multiplied by 0.016, and
- (B) The sum of the EAD of the portion of each wholesale exposure to a defaulted obligor not covered by an eligible guarantee from the U.S. government plus the EAD of the portion of each segment of defaulted retail exposures that is not covered by an eligible guarantee from the U.S. government and the resulting sum is multiplied by 0.08.
- (iii) The sum of all the dollar risk-based capital requirements for each wholesale exposure to a defaulted obligor and each segment of defaulted retail exposures calculated in paragraph (e)(2)(i) of this section plus the dollar risk-based capital requirements each wholesale exposure to a defaulted obligor and for each segment of defaulted retail exposures calculated in paragraph (e)(2)(ii) of this section equals the total dollar risk-based capital requirement for those exposures and segments.
- (iv) The aggregate risk-weighted asset amount for wholesale exposures to defaulted obligors and segments of defaulted retail exposures equals the total dollar risk-based capital requirement calculated in paragraph (e)(2)(iii) of this section multiplied by 12.5.
- (3) Assets not included in a defined exposure category. (i) A national bank or Federal savings association may assign a risk-weighted asset amount of zero to cash owned and held in all offices of the national bank or Federal savings association or in transit and for gold bullion held in the national bank's or Federal savings association's own vaults, or held in another national bank's or Federal savings association's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.
- (ii) A national bank or Federal savings association must assign a risk-weighted asset amount equal to 20 percent of the carrying value of cash items in the process of collection.

- (iii) A national bank or Federal savings association must assign a risk-weighted asset amount equal to 50 percent of the carrying value to a pre-sold construction loan unless the purchase contract is cancelled, in which case a national bank or Federal savings association must assign a risk-weighted asset amount equal to a 100 percent of the carrying value of the pre-sold construction loan.
- (iv) The risk-weighted asset amount for the residual value of a retail lease exposure equals such residual value.
- (v) The risk-weighted asset amount for DTAs arising from temporary differences that the national bank or Federal savings association could realize through net operating loss carrybacks equals the carrying value, netted in accordance with §3.22.
- (vi) The risk-weighted asset amount for MSAs, DTAs arising from temporary timing differences that the national bank or Federal savings association could not realize through net operating loss carrybacks, and significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not deducted pursuant to §3.22(a)(7) equals the amount not subject to deduction multiplied by 250 percent.
- (vii) The risk-weighted asset amount for any other on-balance-sheet asset that does not meet the definition of a wholesale, retail, securitization, IMM, or equity exposure, cleared transaction, or default fund contribution and is not subject to deduction under §3.22(a), (c), or (d) equals the carrying value of the asset.
- (4) Non-material portfolios of exposures. The risk-weighted asset amount of a portfolio of exposures for which the national bank or Federal savings association has demonstrated to the OCC's satisfaction that the portfolio (when combined with all other portfolios of exposures that the national bank or Federal savings association seeks to treat under this paragraph (e)) is not material to the national bank or Federal savings association is the sum of the carrying values of on-balance sheet exposures plus the notional amounts of off-balance sheet exposures in the portfolio. For purposes of this paragraph (e)(4), the notional amount of an OTC

derivative contract that is not a credit derivative is the EAD of the derivative as calculated in §3.132.

§ 3.132 Counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts.

- (a) Methodologies for collateral recognition. (1) Instead of an LGD estimation methodology, a national bank or Federal savings association may use the following methodologies to recognize the benefits of financial collateral in mitigating the counterparty credit risk of repo-style transactions, eligible margin loans, collateralized OTC derivative contracts and single product netting sets of such transactions, and to recognize the benefits of any collateral in mitigating the counterparty credit risk of repo-style transactions that are included in a national bank's or Federal savings association's VaR-based measure under subpart F of this part:
- (i) The collateral haircut approach set forth in paragraph (b)(2) of this section:
- (ii) The internal models methodology set forth in paragraph (d) of this section; and
- (iii) For single product netting sets of repo-style transactions and eligible margin loans, the simple VaR methodology set forth in paragraph (b)(3) of this section.
- (2) A national bank or Federal savings association may use any combination of the three methodologies for collateral recognition; however, it must use the same methodology for transactions in the same category.
- (3) A national bank or Federal savings association must use the methodology in paragraph (c) of this section, or with prior written approval of the OCC, the internal model methodology in paragraph (d) of this section, to calculate EAD for an OTC derivative contract or a set of OTC derivative contracts subject to a qualifying master netting agreement. To estimate EAD for qualifying cross-product master netting agreements, a national bank or Federal savings association may only use the internal models methodology in paragraph (d) of this section.
- (4) A national bank or Federal savings association must also use the

methodology in paragraph (e) of this section to calculate the risk-weighted asset amounts for CVA for OTC derivatives.

- (b) EAD for eligible margin loans and repo-style transactions—(1) General. A national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures an eligible margin loan, repo-style transaction, or singleproduct netting set of such transactions by factoring the collateral into its LGD estimates for the exposure. Alternatively, a national bank or Federal savings association may estimate an unsecured LGD for the exposure, as well as for any repo-style transaction that is included in the national bank's or Federal savings association's VaRbased measure under subpart F of this part, and determine the EAD of the exposure using:
- (i) The collateral haircut approach described in paragraph (b)(2) of this section:
- (ii) For netting sets only, the simple VaR methodology described in paragraph (b)(3) of this section; or
- (iii) The internal models methodology described in paragraph (d) of this section.
- (2) Collateral haircut approach—(i) EAD equation. A national bank or Federal savings association may determine EAD for an eligible margin loan, repostyle transaction, or netting set by setting EAD equal to max

$$\{0, [(\Sigma E - \Sigma C) + \Sigma (E_s \times H_s) + \Sigma (E_{fx} \times H_{fx})]\},$$

where:

- (A) ΣE equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty under the transaction (or netting set));
- (B) ΣC equals the value of the collateral (the sum of the current fair values of all instruments, gold, and cash the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction (or netting set));

- (C) E_s equals the absolute value of the net position in a given instrument or in gold (where the net position in a given instrument or in gold equals the sum of the current fair values of the instrument or gold the national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of that same instrument or gold the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty);
- (D) H_s equals the market price volatility haircut appropriate to the instrument or gold referenced in E_s;
- (E) E_{fx} equals the absolute value of the net position of instruments and cash in a currency that is different from the settlement currency (where the net position in a given currency equals the sum of the current fair values of any instruments or cash in the
- currency the national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of any instruments or cash in the currency the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty); and
- (F) H_{fx} equals the haircut appropriate to the mismatch between the currency referenced in E_{fx} and the settlement currency.
- (ii) Standard supervisory haircuts. (A) Under the standard supervisory haircuts approach:
- (1) A national bank or Federal savings association must use the haircuts for market price volatility (H_s) in Table 1 to §3.132, as adjusted in certain circumstances as provided in paragraphs (b)(2)(ii)(A)(3) and (4) of this section;

TABLE 1 TO § 3.132—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS 1

		Investment					
Residual maturity	Sovereign issuers risk weight under this section ² (in percent)			Non-sovereign issuers risk weight under this section (in percent)			grade securitization exposures
	Zero	20 or 50	100	20	50	100	(in percent)
Less than or equal to 1 year Greater than 1 year and less than or	0.5	1.0	15.0	1.0	2.0	4.0	4.0
equal to 5 years	2.0	3.0	15.0	4.0	6.0	8.0	12.0
Greater than 5 years	4.0	6.0	15.0	8.0	12.0	16.0	24.0
Main index equities (including convertible bonds) and gold				15.0			
Other publicly traded equities (including convertible bonds)				25.0			
Mutual funds				Highest haircut applicable to any security in which the fund can invest_ ROW RUL='s●'≤			
Cash collateral held			Zero				
Other exposure types			25.0				

¹The market price volatility haircuts in Table 1 to §3.132 are based on a 10 business-day holding period. ²Includes a foreign PSE that receives a zero percent risk weight.

- (2) For currency mismatches, a national bank or Federal savings association must use a haircut for foreign exchange rate volatility ($H_{\rm fx}$) of 8 percent, as adjusted in certain circumstances as provided in paragraphs
- (3) For repo-style transactions, a national bank or Federal savings association may multiply the supervisory

(b)(2)(ii)(A)(3) and (4) of this section.

haircuts provided in paragraphs (b)(2)(ii)(A)(I) and (2) of this section by the square root of $\frac{1}{2}$ (which equals 0.707107)

(4) A national bank or Federal savings association must adjust the supervisory haircuts upward on the basis of a holding period longer than ten business days (for eligible margin loans) or

five business days (for repo-style transactions) where the following conditions apply. If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a national bank or Federal savings association must adjust the supervisory haircuts upward on the basis of a holding period of twenty business days for the following quarter (except when a national bank or Federal savings association is calculating EAD for a cleared transaction under §3.133). If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a national bank or Federal savings association must adjust the supervisory haircuts upward on the basis of a holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the national bank or Federal savings association must adjust the supervisory haircuts upward for that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set. A national bank or Federal savings association must adjust the standard supervisory haircuts upward using the following formula:

$$H_A = H_S \sqrt{\frac{T_M}{T_S}}$$
, where,

- (i) T_M equals a holding period of longer than 10 business days for eligible margin loans and derivative contracts or longer than 5 business days for repo-style transactions;
- (ii) H_s equals the standard supervisory haircut; and
- (iii) T_s equals 10 business days for eligible margin loans and derivative contracts or 5 business days for repo-style transactions.
- (5) If the instrument a national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral does not meet the definition of financial collateral, the national bank or Federal savings association must use a 25.0 percent haircut for market price volatility (Hs).
- (iii) Own internal estimates for haircuts. With the prior written approval of the OCC, a national bank or Federal savings association may calculate haircuts (H_s and H_{fx}) using its own internal

estimates of the volatilities of market prices and foreign exchange rates.

- (A) To receive OCC approval to use its own internal estimates, a national bank or Federal savings association must satisfy the following minimum quantitative standards:
- (1) A national bank or Federal savings association must use a 99th percentile one-tailed confidence interval.
- (2) The minimum holding period for a repo-style transaction is five business days and for an eligible margin loan is ten business days except for transactions or netting sets for which paragraph (b)(2)(iii)(A)(3) of this section applies. When a national bank or Federal savings association calculates an ownestimates haircut on a T_N -day holding period, which is different from the minimum holding period for the transaction type, the applicable haircut (H_M) is calculated using the following square root of time formula:

$$H_M = H_N \sqrt{\frac{T_M}{T_N}}$$
, where

- (i) T_M equals 5 for repo-style transactions and 10 for eligible margin loans:
- (ii) T_N equals the holding period used by the national bank or Federal savings association to derive H_N ; and
- $\it (iii)~H_N$ equals the haircut based on the holding period T_N
- (3) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a national bank or Federal savings association must calculate the haircut using a minimum holding period of twenty business days for the following quarter (except when a national bank or Federal savings association is calculating EAD for a cleared transaction under §3.133). If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a national bank or Federal savings association must calculate the haircut using a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the national bank or Federal savings association must calculate the haircut for transactions in that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set.
- (4) A national bank or Federal savings association is required to calculate its own internal estimates with inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the security or category of securities.
- (5) A national bank or Federal savings association must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the national bank's or Federal savings association's own internal estimates for haircuts under this section and must be able to provide empirical support for the period used. The national bank or Federal savings association must obtain the prior approval of the OCC for, and notify the OCC if the national bank or Federal savings association makes any material changes to, these policies and procedures.

- (6) Nothing in this section prevents the OCC from requiring a national bank or Federal savings association to use a different period of significant financial stress in the calculation of own internal estimates for haircuts.
- (7) A national bank or Federal savings association must update its data sets and calculate haircuts no less frequently than quarterly and must also reassess data sets and haircuts whenever market prices change materially.
- (B) With respect to debt securities that are investment grade, a national bank or Federal savings association may calculate haircuts for categories of securities. For a category of securities, the national bank or Federal savings association must calculate the haircut on the basis of internal volatility estimates for securities in that category that are representative of the securities in that category that the national bank or Federal savings association has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. In determining relevant categories, the national bank or Federal savings association must at a minimum take into account:
 - (1) The type of issuer of the security;
 - (2) The credit quality of the security;
- (3) The maturity of the security; and(4) The interest rate sensitivity of
- (4) The interest rate sensitivity of the security.(C) With respect to debt securities
- that are not investment grade and equity securities, a national bank or Federal savings association must calculate a separate haircut for each individual security.

 (D) Where an exposure or collateral (whether in the form of cash or securi-
- (D) Where an exposure or collateral (whether in the form of cash or securities) is denominated in a currency that differs from the settlement currency, the national bank or Federal savings association must calculate a separate currency mismatch haircut for its net position in each mismatched currency based on estimated volatilities of foreign exchange rates between the mismatched currency and the settlement currency.
- (E) A national bank's or Federal savings association's own estimates of market price and foreign exchange rate volatilities may not take into account the correlations among securities and

foreign exchange rates on either the exposure or collateral side of a transaction (or netting set) or the correlations among securities and foreign exchange rates between the exposure and collateral sides of the transaction (or netting set).

- (3) Simple VaR methodology. With the prior written approval of the OCC, a national bank or Federal savings association may estimate EAD for a netting set using a VaR model that meets the requirements in paragraph (b)(3)(iii) of this section. In such event, the national bank or Federal savings association must set EAD equal to max $\{0, [(\Sigma E \Sigma C) + PFE]\}$, where:
- (i) ΣE equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the national bank or Federal savings association has lent, sold subject to repurchase, or posted as collateral to the counterparty under the netting set):
- (ii) ΣC equals the value of the collateral (the sum of the current fair values of all instruments, gold, and cash the national bank or Federal savings association has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the netting set); and
- (iii) PFE (potential future exposure) equals the national bank's or Federal savings association's empirically based best estimate of the 99th percentile, one-tailed confidence interval for an increase in the value of $(\Sigma E - \Sigma C)$ over a five-business-day holding period for repo-style transactions, or over a tenbusiness-day holding period for eligible margin loans except for netting sets for which paragraph (b)(3)(iv) of this section applies using a minimum one-year historical observation period of price data representing the instruments that the national bank or Federal savings association has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. The national bank or Federal savings association must validate its VaR model by establishing and maintaining a rigorous and regular backtesting regime.
- (iv) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a national bank or Federal savings association must use a

twenty-business-day holding period for the following quarter (except when a national bank or Federal savings association is calculating EAD for a cleared transaction under §3.133). If a netting set contains one or more trades involving illiquid collateral, a national bank or Federal savings association must use a twenty-business-day holding period. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the national bank or Federal savings association must set its PFE for that netting set equal to an estimate over a holding period that is at least two times the minimum holding period for that netting set.

- (c) EAD for OTC derivative contracts—
 (1) OTC derivative contracts not subject to a qualifying master netting agreement. A national bank or Federal savings association must determine the EAD for an OTC derivative contract that is not subject to a qualifying master netting agreement using the current exposure methodology in paragraph (c)(5) of this section or using the internal models methodology described in paragraph (d) of this section.
- (2) OTC derivative contracts subject to a qualifying master netting agreement. A national bank or Federal savings association must determine the EAD for multiple OTC derivative contracts that are subject to a qualifying master netting agreement using the current exposure methodology in paragraph (c)(6) of this section or using the internal models methodology described in paragraph (d) of this section.
- (3) Credit derivatives. Notwithstanding paragraphs (c)(1) and (c)(2) of this section:
- (i) A national bank or Federal savings association that purchases a credit derivative that is recognized under §3.134 or §3.135 as a credit risk mitigant for an exposure that is not a covered position under subpart F of this part is not required to calculate a separate counterparty credit risk capital requirement under this section so long as the national bank or Federal savings association does so consistently for all such credit derivatives and either includes or excludes all such credit derivatives that are subject to a

master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes.

(ii) A national bank or Federal savings association that is the protection provider in a credit derivative must treat the credit derivative as a wholesale exposure to the reference obligor and is not required to calculate a counterparty credit risk capital requirement for the credit derivative under this section, so long as it does so consistently for all such credit derivatives and either includes all or excludes all such credit derivatives that are subject to a master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for riskbased capital purposes (unless the national bank or Federal savings association is treating the credit derivative as a covered position under subpart F of this part, in which case the national bank or Federal savings association calculate a supplemental counterparty credit risk capital requirement under this section).

(4) Equity derivatives. A national bank or Federal savings association must treat an equity derivative contract as an equity exposure and compute a riskweighted asset amount for the equity derivative contract under §§ 3.151-3.155 (unless the national bank or Federal savings association is treating the contract as a covered position under subpart F of this part). In addition, if the national bank or Federal savings association is treating the contract as a covered position under subpart F of this part, and under certain other circumstances described in §3.155, the national bank or Federal savings association must also calculate a risk-based capital requirement for the counterparty credit risk of an equity derivative contract under this section.

(5) Single OTC derivative contract. Except as modified by paragraph (c)(7) of this section, the EAD for a single OTC derivative contract that is not subject to a qualifying master netting agreement is equal to the sum of the national bank's or Federal savings association's current credit exposure and potential future credit exposure (PFE) on the derivative contract.

(i) Current credit exposure. The current credit exposure for a single OTC derivative contract is the greater of the mark-to-fair value of the derivative contract or zero; and

(ii) PFE. The PFE for a single OTC derivative contract, including an OTC derivative contract with a negative mark-to-fair value, is calculated by multiplying the notional principal amount of the derivative contract by the appropriate conversion factor in Table 2 to §3.132. For purposes of calculating either the PFE under paragraph (c)(5) of this section or the gross PFE under paragraph (c)(6) of this section for exchange rate contracts and other similar contracts in which the notional principal amount is equivalent to the cash flows, the notional principal amount is the net receipts to each party falling due on each value date in each currency. For any OTC derivative contract that does not fall within one of the specified categories in Table 2 to §3.132, the PFE must be calculated using the "other" conversion factors. A national bank or Federal savings association must use an OTC derivative contract's effective notional principal amount (that is, its apparent or stated notional principal amount multiplied by any multiplier in the OTC derivative contract) rather than its apparent or stated notional principal amount in calculating PFE. PFE of the protection provider of a credit derivative is capped at the net present value of the amount of unpaid premiums.

TABLE 2 TO § 3.132—CONVERSION FACTOR MATRIX FOR OTC DERIVATIVE CONTRACTS 1

Remaining maturity ²	Interest rate	Foreign exchange rate and gold	Credit (investment- grade ref- erence asset) 3	Credit (non- investment- grade reference asset)	Equity	Precious metals (except gold)	Other
One year or less Over one to five years	l	0.01 0.05	0.05 0.05	0.10 0.10	0.06 0.08	0.07 0.07	0.10 0.12

TABLE 2 TO § 3.132—CONVERSION FACTOR MATRIX FOR OTC DERIVATIVE CONTRACTS 1— Continued

Remaining maturity ²	Interest rate	Foreign exchange rate and gold	Credit (investment- grade ref- erence asset) 3	Credit (non- investment- grade reference asset)	Equity	Precious metals (except gold)	Other
Over five years	0.015	0.075	0.05	0.10	0.10	0.08	0.15

¹ For an OTC derivative contract with multiple exchanges of principal, the conversion factor is multiplied by the number of re-

maining payments in the derivative contract.

² For an OTC derivative contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the fair value of the contract is zero, the remaining maturity equals the time until the next reset date. For an interest rate derivative contract with a remaining maturity of greater than one year that meets these criteria, the minimum conversion factor is 0.005.

³A national bank or Federal savings association must use the column labeled "Credit (investment-grade reference asset)" for a credit derivative whose reference asset is an outstanding unsecured long-term debt security without credit enhancement that is investment grade. A national bank or Federal savings association must use the column labeled "Credit (non-investment-grade reference asset)" for all other credit derivatives.

- (6) Multiple OTC derivative contracts subject to a qualifying master netting agreement. Except as modified by paragraph (c)(7) of this section, the EAD for multiple OTC derivative contracts subject to a qualifying master netting agreement is equal to the sum of the net current credit exposure and the adjusted sum of the PFE exposure for all OTC derivative contracts subject to the qualifying master netting agreement.
- (i) Net current credit exposure. The net current credit exposure is the greater of:
- (A) The net sum of all positive and negative fair values of the individual OTC derivative contracts subject to the qualifying master netting agreement;
 - (B) Zero: and
- (ii) Adjusted sum of the PFE. The adjusted sum of the PFE, Anet, is calculated as

 $A_{net} = (0.4 \times A_{gross}) + (0.6 \times NGR \times A_{gross}),$

where:

- (A) A_{gross} = the gross PFE (that is, the sum of the PFE amounts (as determined under paragraph (c)(5)(ii) of this section) for each individual derivative contract subject to the qualifying master netting agreement); and
- (B) NGR = the net to gross ratio (that is, the ratio of the net current credit exposure to the gross current credit exposure). In calculating the NGR, the gross current credit exposure equals the sum of the positive current credit exposures (as determined under paragraph (c)(6)(i) of this section) of all individual derivative contracts subject to

the qualifying master netting agreement.

- (7) Collateralized OTC derivative contracts. A national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures an OTC derivative contract or single-product netting set of OTC derivatives by factoring the collateral into its LGD estimates for the contract or netting set. Alternatively, a national bank or Federal savings association may recognize the credit risk mitigation benefits of financial collateral that secures such a contract or netting set that is markedto-market on a daily basis and subject to a daily margin maintenance requirement by estimating an unsecured LGD for the contract or netting set and adjusting the EAD calculated under paragraph (c)(5) or (c)(6) of this section using the collateral haircut approach in paragraph (b)(2) of this section. The national bank or Federal savings association must substitute the EAD calculated under paragraph (c)(5) or (c)(6) of this section for ΣE in the equation in paragraph (b)(2)(i) of this section and must use a ten-business day minimum holding period ($T_M = 10$) unless a longer holding period is required by paragraph (b)(2)(iii)(A)(3) of this section.
- (8) Clearing member national bank's or Federal savings association's EAD. A clearing member national bank's or Federal savings association's EAD for an OTC derivative contract or netting set of OTC derivative contracts where the national bank or Federal savings association is either acting as a financial intermediary and enters into an

offsetting transaction with a QCCP or where the national bank or Federal savings association provides a guarantee to the QCCP on the performance of the client equals the exposure amount calculated according to paragraph (c)(5) or (6) of this section multiplied by the scaling factor 0.71. If the national bank or Federal savings association determines that a longer period is appropriate, it must use a larger scaling factor to adjust for a longer holding period as follows:

Scaling factor = $\sqrt{\frac{H}{100}}$

where

- H = the holding period greater than five days. Additionally, the OCC may require the national bank or Federal savings association to set a longer holding period if the OCC determines that a longer period is appropriate due to the nature, structure, or characteristics of the transaction or is commensurate with the risks associated with the transaction.
- (d) Internal models methodology. (1)(i) With prior written approval from the OCC, a national bank or Federal savings association may use the internal models methodology in this paragraph (d) to determine EAD for counterparty credit risk for derivative contracts (collateralized or uncollateralized) and single-product netting sets thereof, for eligible margin loans and single-product netting sets thereof, and for repostyle transactions and single-product netting sets thereof.
- (ii) A national bank or Federal savings association that uses the internal models methodology for a particular transaction type (derivative contracts, eligible margin loans, or repo-style transactions) must use the internal models methodology for all transactions of that transaction type. A national bank or Federal savings association may choose to use the internal models methodology for one or two of these three types of exposures and not the other types.
- (iii) A national bank or Federal savings association may also use the internal models methodology for derivative contracts, eligible margin loans, and repo-style transactions subject to a qualifying cross-product netting agreement if:

- (A) The national bank or Federal savings association effectively integrates the risk mitigating effects of cross-product netting into its risk management and other information technology systems; and
- (B) The national bank or Federal savings association obtains the prior written approval of the OCC.
- (iv) A national bank or Federal savings association that uses the internal models methodology for a transaction type must receive approval from the OCC to cease using the methodology for that transaction type or to make a material change to its internal model.
- (2) Risk-weighted assets using IMM. Under the IMM, a national bank or Federal savings association uses an internal model to estimate the expected exposure (EE) for a netting set and then calculates EAD based on that EE. A national bank or Federal savings association must calculate two EEs and two EADs (one stressed and one unstressed) for each netting set as follows:
- (i) EAD_{unstressed} is calculated using an EE estimate based on the most recent data meeting the requirements of paragraph (d)(3)(vii) of this section:
- (ii) EAD_{stressed} is calculated using an EE estimate based on a historical period that includes a period of stress to the credit default spreads of the national bank's or Federal savings association's counterparties according to paragraph (d)(3)(viii) of this section;
- (iii) The national bank or Federal savings association must use its internal model's probability distribution for changes in the fair value of a netting set that are attributable to changes in market variables to determine EE; and

§3.132

(iv) Under the internal models methodology, EAD = Max $(0, \alpha \text{ x effective EPE} - \text{CVA})$, or, subject to the prior written approval of OCC as provided in paragraph (d)(10) of this section, a more conservative measure of EAD.

(A) CVA equals the credit valuation adjustment that the national bank or Federal savings association has recognized in its balance sheet valuation of

any OTC derivative contracts in the netting set. For purposes of this paragraph (d), CVA does not include any adjustments to common equity tier 1 capital attributable to changes in the fair value of the national bank's or Federal savings association's liabilities that are due to changes in its own creditrisk since the inception of the transaction with the counterparty.

(B) Effective
$$EPE_{t_k} = \sum_{k=1}^{n} Effective EE_k \times \Delta t_k$$

(that is, effective EPE is the time-weighted average of effective EE where the weights are the proportion that an individual effective EE represents in a one-year time interval) where:

(1) Effective
$$EE_{t_k} = \max(EffectiveEE_{t_{k-1}}, EE_{t_k})$$
 (that is, for a specific date t_k ,

effective EE is the greater of EE at that date or the effective EE at the previous date); and

 $(\underline{2})$ t_k represents the k^{th} future time period in the model and there are n time periods represented in the model over the first year, and

(C) α = 1.4 except as provided in paragraph (d)(5) of this section, or when the OCC has determined that the national bank or Federal savings association must set α higher based on the national bank's or Federal savings association's specific characteristics of counterparty credit risk or model performance.

- (v) A national bank or Federal savings association may include financial collateral currently posted by the counterparty as collateral (but may not include other forms of collateral) when calculating EE.
- (vi) If a national bank or Federal savings association hedges some or all of the counterparty credit risk associated with a netting set using an eligible credit derivative, the national bank or Federal savings association may take the reduction in exposure to the counterparty into account when estimating EE. If the national bank or Federal savings association recognizes this reduction in exposure to the

counterparty in its estimate of EE, it must also use its internal model to estimate a separate EAD for the national bank's or Federal savings association's exposure to the protection provider of the credit derivative.

- (3) Prior approval relating to EAD calculation. To obtain OCC approval to calculate the distributions of exposures upon which the EAD calculation is based, the national bank or Federal savings association must demonstrate to the satisfaction of the OCC that it has been using for at least one year an internal model that broadly meets the following minimum standards, with which the national bank or Federal savings association must maintain compliance:
- (i) The model must have the systems capability to estimate the expected exposure to the counterparty on a daily basis (but is not expected to estimate or report expected exposure on a daily basis);

- (ii) The model must estimate expected exposure at enough future dates to reflect accurately all the future cash flows of contracts in the netting set;
- (iii) The model must account for the possible non-normality of the exposure distribution, where appropriate;
- (iv) The national bank or Federal savings association must measure, monitor, and control current counterparty exposure and the exposure to the counterparty over the whole life of all contracts in the netting set;
- (v) The national bank or Federal savings association must be able to measure and manage current exposures gross and net of collateral held, where appropriate. The national bank or Federal savings association must estimate expected exposures for OTC derivative contracts both with and without the effect of collateral agreements;
- (vi) The national bank or Federal savings association must have procedures to identify, monitor, and control wrong-way risk throughout the life of an exposure. The procedures must include stress testing and scenario analysis:
- (vii) The model must use current market data to compute current exposures. The national bank or Federal savings association must estimate model parameters using historical data from the most recent three-year period and update the data quarterly or more frequently if market conditions warrant. The national bank or Federal savings association should consider using model parameters based on forward-looking measures, where appropriate;
- (viii) When estimating model parameters based on a stress period, the national bank or Federal savings association must use at least three years of historical data that include a period of stress to the credit default spreads of the national bank's or Federal savings association's counterparties. The national bank or Federal savings association must review the data set and update the data as necessary, particularly for any material changes in its

- counterparties. The national bank or Federal savings association must demonstrate, at least quarterly, and maintain documentation of such demonstration, that the stress period coincides with increased CDS or other credit spreads of the national bank's or Federal savings association's counterparties. The national bank or Federal savings association must have procedures to evaluate the effectiveness of its stress calibration that include a process for using benchmark portfolios that are vulnerable to the same risk factors as the national bank's or Federal savings association's portfolio. The OCC may require the national bank or Federal savings association to modify its stress calibration to better reflect actual historic losses of the portfolio;
- (ix) A national bank or Federal savings association must subject its internal model to an initial validation and annual model review process. The model review should consider whether the inputs and risk factors, as well as the model outputs, are appropriate. As part of the model review process, the national bank or Federal savings association must have a backtesting program for its model that includes a process by which unacceptable model performance will be determined and remedied;
- (x) A national bank or Federal savings association must have policies for the measurement, management and control of collateral and margin amounts; and
- (xi) A national bank or Federal savings association must have a comprehensive stress testing program that captures all credit exposures to counterparties, and incorporates stress testing of principal market risk factors and creditworthiness of counterparties.
- (4) Calculating the maturity of exposures. (i) If the remaining maturity of the exposure or the longest-dated contract in the netting set is greater than one year, the national bank or Federal savings association must set M for the exposure or netting set equal to the lower of five years or M(EPE), where:

(A)
$$M(EPE) = 1 + \frac{\sum_{t_k>1 \text{ year}}^{maturity} EE_k \times \Delta t_k \times df_k}{\sum_{k=1}^{t_k\leq 1 \text{ year}} effective EE_k \times \Delta t_k \times df_k};$$

(B) df_k is the risk-free discount factor for future time period t_k ; and

(C)
$$\Delta t_k = t_k - t_{k-1}$$
.

(ii) If the remaining maturity of the exposure or the longest-dated contract in the netting set is one year or less, the national bank or Federal savings association must set M for the exposure or netting set equal to one year, except as provided in §3.131(d)(7).

(iii) Alternatively, a national bank or Federal savings association that uses an internal model to calculate a one-sided credit valuation adjustment may use the effective credit duration estimated by the model as M(EPE) in place of the formula in paragraph (d)(4)(i) of this section.

(5) Effects of collateral agreements on EAD. A national bank or Federal savings association may capture the effect on EAD of a collateral agreement that requires receipt of collateral when exposure to the counterparty increases, but may not capture the effect on EAD of a collateral agreement that requires receipt of collateral when counterparty credit quality deteriorates. Two methods are available to capture the effect of a collateral agreement, as set forth in paragraphs (d)(5)(i) and (ii) of this section:

(i) With prior written approval from the OCC, a national bank or Federal savings association may include the effect of a collateral agreement within its internal model used to calculate EAD. The national bank or Federal savings association may set EAD equal to the expected exposure at the end of the margin period of risk. The margin period of risk means, with respect to a netting set subject to a collateral agreement, the time period from the most recent exchange of collateral with a counterparty until the next re-

quired exchange of collateral, plus the period of time required to sell and realize the proceeds of the least liquid collateral that can be delivered under the terms of the collateral agreement and, where applicable, the period of time required to re-hedge the resulting market risk upon the default of the counterparty. The minimum margin period of risk is set according to paragraph (d)(5)(iii) of this section; or

(ii) As an alternative to paragraph (d)(5)(i) of this section, a national bank or Federal savings association that can model EPE without collateral agreements but cannot achieve the higher level of modeling sophistication to model EPE with collateral agreements can set effective EPE for a collateralized netting set equal to the lesser of:

(A) An add-on that reflects the potential increase in exposure of the netting set over the margin period of risk, plus the larger of:

(1) The current exposure of the netting set reflecting all collateral held or posted by the national bank or Federal savings association excluding any collateral called or in dispute; or

(2) The largest net exposure including all collateral held or posted under the margin agreement that would not trigger a collateral call. For purposes of this section, the add-on is computed as the expected increase in the netting set's exposure over the margin period of risk (set in accordance with paragraph (d)(5)(iii) of this section); or

(B) Effective EPE without a collateral agreement plus any collateral the

national bank or Federal savings association posts to the counterparty that exceeds the required margin amount.

- (iii) For purposes of this part, including paragraphs (d)(5)(i) and (ii) of this section, the margin period of risk for a netting set subject to a collateral agreement is:
- (A) Five business days for repo-style transactions subject to daily remargining and daily marking-to-market, and ten business days for other transactions when liquid financial collateral is posted under a daily margin maintenance requirement, or
- (B) Twenty business days if the number of trades in a netting set exceeds 5,000 at any time during the previous quarter or contains one or more trades involving illiquid collateral or any derivative contract that cannot be easily replaced (except if the national bank or Federal savings association is calculating EAD for a cleared transaction under §3.133). If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the margin period of risk, then the national bank or Federal savings association must use a margin period of risk for that netting set that is at least two times the minimum margin period of risk for that netting set. If the periodicity of the receipt of collateral is N-days, the minimum margin period of risk is the minimum margin period of risk under this paragraph (d) plus N minus 1. This period should be extended to cover any impediments to prompt re-hedging of any market risk.
- (C) Five business days for an OTC derivative contract or netting set of OTC derivative contracts where the national bank or Federal savings association is either acting as a financial intermediary and enters into an offsetting transaction with a CCP or where the national bank or Federal savings association provides a guarantee to the CCP on the performance of the client. A national bank or Federal savings association must use a longer holding period if the national bank or Federal savings association determines that a longer period is appropriate. Additionally, the OCC may require the national bank or Federal savings association to set a longer holding period if the OCC

determines that a longer period is appropriate due to the nature, structure, or characteristics of the transaction or is commensurate with the risks associated with the transaction.

- (6) Own estimate of alpha. With prior written approval of the OCC, a national bank or Federal savings association may calculate alpha as the ratio of economic capital from a full simulation of counterparty exposure across counterparties that incorporates a joint simulation of market and credit risk factors (numerator) and economic capital based on EPE (denominator), subject to a floor of 1.2. For purposes of this calculation, economic capital is the unexpected losses for all counterparty credit risks measured at a 99.9 percent confidence level over a one-year horizon. To receive approval, the national bank or Federal savings association must meet the following minimum standards to the satisfaction of the OCC:
- (i) The national bank's or Federal savings association's own estimate of alpha must capture in the numerator the effects of:
- (A) The material sources of stochastic dependency of distributions of fair values of transactions or portfolios of transactions across counterparties;
- (B) Volatilities and correlations of market risk factors used in the joint simulation, which must be related to the credit risk factor used in the simulation to reflect potential increases in volatility or correlation in an economic downturn, where appropriate;
- (C) The granularity of exposures (that is, the effect of a concentration in the proportion of each counterparty's exposure that is driven by a particular risk factor).
- (ii) The national bank or Federal savings association must assess the potential model uncertainty in its estimates of alpha.
- (iii) The national bank or Federal savings association must calculate the numerator and denominator of alpha in a consistent fashion with respect to modeling methodology, parameter specifications, and portfolio composition.
- (iv) The national bank or Federal savings association must review and

adjust as appropriate its estimates of the numerator and denominator of alpha on at least a quarterly basis and more frequently when the composition of the portfolio varies over time.

- (7) Risk-based capital requirements for transactions with specific wrong-way risk. A national bank or Federal savings association must determine if a repostyle transaction, eligible margin loan, bond option, or equity derivative contract or purchased credit derivative to which the national bank or Federal savings association applies the internal models methodology under this paragraph (d) has specific wrong-way risk. If a transaction has specific wrong-way risk, the national bank or Federal savings association must treat the transaction as its own netting set and exclude it from the model described in §3.132(d)(2) and instead calculate the risk-based capital requirement for the transaction as follows:
- (i) For an equity derivative contract, by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of §3.131 using the PD of the counterparty and LGD equal to 100 percent, by
- (B) The maximum amount the national bank or Federal savings association could lose on the equity derivative.
- (ii) For a purchased credit derivative by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of §3.131 using the PD of the counterparty and LGD equal to 100 percent, by
- (B) The fair value of the reference asset of the credit derivative.
- (iii) For a bond option, by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of §3.131 using the PD of the counterparty and LGD equal to 100 percent, by
- (B) The smaller of the notional amount of the underlying reference asset and the maximum potential loss under the bond option contract.
- (iv) For a repo-style transaction or eligible margin loan by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula speci-

fied in Table 1 of §3.131 using the PD of the counterparty and LGD equal to 100 percent, by

- (B) The EAD of the transaction determined according to the EAD equation in §3.131(b)(2), substituting the estimated value of the collateral assuming a default of the counterparty for the value of the collateral in Σc of the equation.
- (8) Risk-weighted asset amount for IMM exposures with specific wrong-way risk. The aggregate risk-weighted asset amount for IMM exposures with specific wrong-way risk is the sum of a national bank's or Federal savings association's risk-based capital requirement for purchased credit derivatives that are not bond options with specific wrong-way risk as calculated under paragraph (d)(7)(ii) of this section, a national bank's or Federal savings association's risk-based capital requirement for equity derivatives with specific wrong-way risk as calculated under paragraph (d)(7)(i) of this section, a national bank's or Federal savings association's risk-based capital requirement for bond options with specific wrong-way risk as calculated under paragraph (d)(7)(iii) of this section, and a national bank's or Federal savings association's risk-based capital requirement for repo-style transactions and eligible margin loans with specific wrong-way risk as calculated under paragraph (d)(7)(iv) of this section, multiplied by 12.5.
- (9) Risk-weighted assets for IMM exposures. (i) The national bank or Federal savings association must insert the assigned risk parameters for counterparty and netting set into the appropriate formula specified in Table 1 of §3.131 and multiply the output of the formula by the EAD_{unstressed} of the netting set to obtain the unstressed capital requirement for each netting set. A national bank or Federal savings association that uses an advanced CVA approach that captures migrations in credit spreads under paragraph (e)(3) of this section must set the maturity adjustment (b) in the formula equal to zero. The sum of the unstressed capital requirement calculated for each netting set equals K_{unstressed}.

(ii) The national bank or Federal savings association must insert the assigned risk parameters for each wholesale obligor and netting set into the appropriate formula specified in Table 1 of §3.131 and multiply the output of the formula by the EAD_{stressed} of the netting set to obtain the stressed capital requirement for each netting set. A national bank or Federal savings association that uses an advanced CVA approach that captures migrations in credit spreads under paragraph (e)(3) of this section must set the maturity adjustment (b) in the formula equal to zero. The sum of the stressed capital requirement calculated for each netting set equals K_{stressed}.

(iii) The national bank's or Federal savings association's dollar risk-based capital requirement under the internal models methodology equals the larger of K_{unstressed} and K_{stressed}. A national bank's or Federal savings association's risk-weighted assets amount for IMM exposures is equal to the capital requirement multiplied by 12.5, plus risk-weighted assets for IMM exposures with specific wrong-way risk in paragraph (d)(8) of this section and those in paragraph (d)(10) of this section.

(10) Other measures of counterparty exposure. (i) With prior written approval of the OCC, a national bank or Federal savings association may set EAD equal to a measure of counterparty credit risk exposure, such as peak EAD, that is more conservative than an alpha of 1.4 (or higher under the terms of paragraph (d)(7)(iv)(C) of this section) times the larger of EPE_{unstressed} and EPE_{stressed} for every counterparty whose EAD will be measured under the alternative measure of counterparty exposure. The national bank or Federal savings association must demonstrate the conservatism of the measure of counterparty credit risk exposure used for EAD. With respect to paragraph (d)(10)(i) of this section:

(A) For material portfolios of new OTC derivative products, the national bank or Federal savings association may assume that the current exposure methodology in paragraphs (c)(5) and (c)(6) of this section meets the conservatism requirement of this section for a period not to exceed 180 days.

(B) For immaterial portfolios of OTC derivative contracts, the national bank or Federal savings association generally may assume that the current exposure methodology in paragraphs (c)(5) and (c)(6) of this section meets the conservatism requirement of this section.

(ii) To calculate risk-weighted assets for purposes of the approach in paragraph (d)(10)(i) of this section, the national bank or Federal savings association must insert the assigned risk parameters for each counterparty and netting set into the appropriate formula specified in Table 1 of §3.131, multiply the output of the formula by the EAD for the exposure as specified above, and multiply by 12.5.

(e) Credit valuation adjustment (CVA) risk-weighted assets—(1) In general. With respect to its OTC derivative contracts, a national bank or Federal savings association must calculate a CVA riskweighted asset amount for its portfolio of OTC derivative transactions that are subject to the CVA capital requirement using the simple CVA approach described in paragraph (e)(5) of this section or, with prior written approval of the OCC, the advanced CVA approach described in paragraph (e)(6) of this section. A national bank or Federal savings association that receives prior OCC approval to calculate its CVA risk-weighted asset amounts for a class of counterparties using the advanced CVA approach must continue to use that approach for that class of counterparties until it notifies the OCC in writing that the national bank or Federal savings association expects to begin calculating its CVA risk-weighted asset amount using the simple CVA approach. Such notice must include an explanation of the national bank's or Federal savings association's rationale and the date upon which the national bank or Federal savings association will begin to calculate its CVA riskweighted asset amount using the simple CVA approach.

(2) Market risk national banks or Federal savings associations. Notwithstanding the prior approval requirement in paragraph (e)(1) of this section, a market risk national bank or Federal savings association may calculate its CVA risk-weighted asset amount using

the advanced CVA approach if the national bank or Federal savings association has OCC approval to:

(i) Determine EAD for OTC derivative contracts using the internal models methodology described in paragraph (d) of this section; and

(ii) Determine its specific risk add-on for debt positions issued by the counterparty using a specific risk model described in §3.207(b).

(3) Recognition of hedges. (i) A national bank or Federal savings association may recognize a single name CDS, single name contingent CDS, any other equivalent hedging instrument that references the counterparty directly, and index credit default swaps (CDS_{ind}) as a CVA hedge under paragraph (e)(5)(ii) of this section or paragraph (e)(6) of this section, provided that the

position is managed as a CVA hedge in accordance with the national bank's or Federal savings association's hedging policies.

- (ii) A national bank or Federal savings association shall not recognize as a CVA hedge any tranched or nth-to-default credit derivative.
- (4) Total CVA risk-weighted assets. Total CVA risk-weighted assets is the CVA capital requirement, K_{CVA} , calculated for a national bank's or Federal savings association's entire portfolio of OTC derivative counterparties that are subject to the CVA capital requirement, multiplied by 12.5.
- (5) Simple CVA approach. (i) Under the simple CVA approach, the CVA capital requirement, K_{CVA} , is calculated according to the following formula:

$$K_{CVA} = 2.33 \times \sqrt{\left(\sum_{i} 0.5 \times w_{i} \times \left(M_{i} \times EAD_{i}^{total} - M_{i}^{hedge} \times B_{i}\right) - \sum_{ind} w_{ind} \times M_{ind} \times B_{ind}\right)^{2} + A}$$

Where:

$$A = \sum_{i} 0.75 \times w_{i}^{2} \times \left(M_{i} \times EAD_{i}^{total} - M_{i}^{hedge} \times B_{i} \right)^{2}$$

- (A) w_i = the weight applicable to counterparty i under Table 3 to §3.132;
- (B) M_i = the EAD-weighted average of the effective maturity of each netting set with counterparty i (where each netting set's effective maturity can be no less than one year.)
- (C) EAD_i^{total} = the sum of the EAD for all netting sets of OTC derivative contracts with counterparty i calculated using the current exposure methodology described in paragraph (c) of this section or the internal models methodology described in paragraph (d) of this section. When the national bank or Federal savings association calculates EAD under paragraph (c) of this section, such EAD may be adjusted for purposes of calculating EAD, total by multiplying EAD by $(1-\exp(-0.05 \times M_i))/$ $(0.05 \times M_i)$, where "exp" is the exponential function. When the national bank or Federal savings association calculates EAD under paragraph (d) of this section, EADitotal equals EADunstressed.
- (D) $M_i^{hedge}=$ the notional weighted average maturity of the hedge instrument.
- (E) B_i = the sum of the notional amounts of any purchased single name CDS referencing counterparty i that is used to hedge CVA risk to counterparty i multiplied by $(1-\exp(-0.05 \times M_i^{hedge}))/(0.05 \times M_i^{hedge})$.
- (F) $M_{\rm ind}$ = the maturity of the CDS_{ind} or the notional weighted average maturity of any CDS_{ind} purchased to hedge CVA risk of counterparty i.
- (G) B_{ind} = the notional amount of one or more $\mathrm{CDS}_{\mathrm{ind}}$ purchased to hedge CVA risk for counterparty i multiplied by $(1-\exp(-0.05 \times M_{ind}))/(0.05 \times M_{ind})$
- (H) w_{ind} = the weight applicable to the CDS_{ind} based on the average weight of the underlying reference names that comprise the index under Table 3 to § 3.132.
- (ii) The national bank or Federal savings association may treat the notional amount of the index attributable to a

counterparty as a single name hedge of counterparty i (B_i) when calculating K_{CVA} , and subtract the notional amount of B_i from the notional amount of the CDS_{ind}. A national bank or Federal savings association must treat the CDS_{ind} hedge with the notional amount reduced by B_i as a CVA hedge.

TABLE 3 TO § 3.132—ASSIGNMENT OF COUNTERPARTY WEIGHT

Internal PD (in percent)	Weight w _i (in percent)
0.00-0.07	0.70
>0.070-0.15	0.80
>0.15-0.40	1.00
>0.40-2.00	2.00
>2.00-6.00	3.00
>6.00	10.00

(6) Advanced CVA approach. (i) A national bank or Federal savings association may use the VaR model that it uses to determine specific risk under §3.207(b) or another VaR model that meets the quantitative requirements of §3.205(b) and §3.207(b)(1) to calculate its CVA capital requirement for a counterparty by modeling the impact of changes in the counterparties' credit

spreads, together with any recognized CVA hedges, on the CVA for the counterparties, subject to the following requirements:

- (A) The VaR model must incorporate only changes in the counterparties' credit spreads, not changes in other risk factors. The VaR model does not need to capture jump-to-default risk;
- (B) A national bank or Federal savings association that qualifies to use the advanced CVA approach must include in that approach any immaterial OTC derivative portfolios for which it uses the current exposure methodology in paragraph (c) of this section according to paragraph (e)(6)(viii) of this section: and
- (C) A national bank or Federal savings association must have the systems capability to calculate the CVA capital requirement for a counterparty on a daily basis (but is not required to calculate the CVA capital requirement on a daily basis).
- (ii) Under the advanced CVA approach, the CVA capital requirement, K_{CVA} , is calculated according to the following formulas:

$$K_{CVA} = 3 \times (VaR_{Unstrassed}^{CVA} + VaR_{Strassed}^{CVA})$$

where VaR_j^{CVA} is the 99% VaR reflecting changes of CVA_j and fair value of eligible hedges (aggregated across all counterparties and eligible hedges) resulting from simulated changes of credit spreads over a 10-day time horizon. CVA_j for a given counterparty must be calculated according to

$$CVA_{j} = \left(LGD_{MKT}\right) \times \sum_{i=1}^{T} Max \left(0; \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}}\right) - \exp\left(-\frac{s_{i} \times t_{i}}{LGD_{MKT}}\right)\right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_{i} \times D_{i}}{2}\right)$$

Where

- (A) t_i = the time of the *i*-th revaluation time bucket starting from $t_0 = 0$.
- (B) t_T = the longest contractual maturity across the OTC derivative contracts with the counterparty.
- (C) s_i = the CDS spread for the counterparty at tenor t_i used to calculate the CVA for the counterparty. If
- a CDS spread is not available, the national bank or Federal savings association must use a proxy spread based on the credit quality, industry and region of the counterparty.
- (D) LGD_{MKT} = the loss given default of the counterparty based on the spread of a publicly traded debt instrument of the counterparty, or, where a publicly

traded debt instrument spread is not available, a proxy spread based on the credit quality, industry, and region of the counterparty. Where no market information and no reliable proxy based on the credit quality, industry, and region of the counterparty are available to determine LGD_{MKT}, a national bank or Federal savings association may use a conservative estimate when determining LGD_{MKT}, subject to approval by the OCC.

- (E) EE_i = the sum of the expected exposures for all netting sets with the counterparty at revaluation time t_i , calculated according to paragraphs (e)(6)(iv)(A) and (e)(6)(v)(A) of this section.
- (F) D_i = the risk-free discount factor at time t_i where $D_0 = 1$.

- (G) Exp is the exponential function.
- (H) The subscript j refers either to a stressed or an unstressed calibration as described in paragraphs (e)(6)(iv) and (v) of this section.
- (iii) Notwithstanding paragraphs (e)(6)(i) and (e)(6)(ii) of this section, a national bank or Federal savings association must use the formulas in paragraphs (e)(6)(iii)(A) or (e)(6)(iii)(B) of this section to calculate credit spread sensitivities if its VaR model is not based on full repricing.
- (A) If the VaR model is based on credit spread sensitivities for specific tenors, the national bank or Federal savings association must calculate each credit spread sensitivity according to the following formula:

Regulatory CS01 =

$$0.0001 \times t_i \times exp \left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \times \left(\frac{EE_{i-1} \times D_{i-1} - EE_{i+1} \times D_{i+1}}{2} \right)$$

For the final time bucket i = T, the corresponding formula is

$$0.0001 \times t_{i} \times \exp\left(-\frac{s_{i} \times t_{i}}{LGD_{MKT}}\right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_{T} \times D_{T}}{2}\right)$$
Regulatory CS01 =

(B) If the VaR model uses credit spread sensitivities to parallel shifts in credit spreads,

the [BANK] must calculate each credit spread sensitivity according to the following formula:

Regulatory CS01 =

$$0.0001 \times \sum_{i=1}^{T} \left(t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}}\right) - t_{i-1} \times \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}}\right) \right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_i \times D_i}{2}\right)$$

- (iv) To calculate the $CVA_{\text{Unstressed}}$ measure for purposes of paragraph (e)(6)(ii) of this section, the national bank or Federal savings association must:
- (A) Use the EE_i calculated using the calibration of paragraph (d)(3)(vii) of this section, except as provided in $\S 3.132(e)(6)(vi)$, and
- (B) Use the historical observation period required under §3.205(b)(2).
- (v) To calculate the $CVA_{Stressed}$ measure for purposes of paragraph (e)(6)(ii)

- of this section, the national bank or Federal savings association must:
- (A) Use the EE_i calculated using the stress calibration in paragraph (d)(3)(viii) of this section except as provided in paragraph (e)(6)(vi) of this section.
- (B) Calibrate VaR model inputs to historical data from the most severe twelve-month stress period contained within the three-year stress period

used to calculate EE_i . The OCC may require a national bank or Federal savings association to use a different period of significant financial stress in the calculation of the $CVA_{\rm Stressed}$ measure.

- (vi) If a national bank or Federal savings association captures the effect of a collateral agreement on EAD using the method described in paragraph (d)(5)(ii) of this section, for purposes of paragraph (e)(6)(ii) of this section, the national bank or Federal savings association must calculate EE_i using the method in paragraph (d)(5)(ii) of this section and keep that EE constant with the maturity equal to the maximum of:
- (A) Half of the longest maturity of a transaction in the netting set, and
- (B) The notional weighted average maturity of all transactions in the netting set.
- (vii) For purposes of paragraph (e)(6) of this section, the national bank's or Federal savings association's VaR model must capture the basis between the spreads of any CDS_{ind} that is used as the hedging instrument and the hedged counterparty exposure over various time periods, including benign and stressed environments. If the VaR model does not capture that basis, the national bank or Federal savings association must reflect only 50 percent of the notional amount of the CDS_{ind} hedge in the VaR model.
- (viii) If a national bank or Federal savings association uses the current exposure methodology described in paragraphs (c)(5) and (c)(6) of this section to calculate the EAD for any immaterial portfolios of OTC derivative contracts, the national bank or Federal savings association must use that EAD as a constant EE in the formula for the calculation of CVA with the maturity equal to the maximum of:
- (A) Half of the longest maturity of a transaction in the netting set, and
- (B) The notional weighted average maturity of all transactions in the netting set.

§ 3.133 Cleared transactions.

(a) General requirements. (1) A national bank or Federal savings association that is a clearing member client must use the methodologies described

- in paragraph (b) of this section to calculate risk-weighted assets for a cleared transaction.
- (2) A national bank or Federal savings association that is a clearing member must use the methodologies described in paragraph (c) of this section to calculate its risk-weighted assets for cleared transactions and paragraph (d) of this section to calculate its risk-weighted assets for its default fund contribution to a CCP.
- (b) Clearing member client national banks or Federal savings associations—(1) Risk-weighted assets for cleared transactions. (i) To determine the risk-weighted asset amount for a cleared transaction, a national bank or Federal savings association that is a clearing member client must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (b)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (b)(3) of this section.
- (ii) A clearing member client national bank's or Federal savings association's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.
- (2) Trade exposure amount. (i) For a cleared transaction that is a derivative contract or a netting set of derivative contracts, trade exposure amount equals the EAD for the derivative contract or netting set of derivative contracts calculated using the methodology used to calculate EAD for OTC derivative contracts set forth in §3.132(c) or (d), plus the fair value of the collateral posted by the clearing member client national bank or Federal savings association and held by the CCP or a clearing member in a manner that is not bankruptcy remote. When the national bank or Federal savings association calculates EAD for the cleared transaction using the methodology in §3.132(d), EAD equals EAD_{unstressed}.
- (ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals the EAD for the repo-style transaction calculated using the methodology set forth in §3.132(b)(2), (b)(3), or (d), plus the fair

value of the collateral posted by the clearing member client national bank or Federal savings association and held by the CCP or a clearing member in a manner that is not bankruptcy remote. When the national bank or Federal savings association calculates EAD for the cleared transaction under $\S 3.132(d)$, EAD equals EAD_{unstressed}.

- (3) Cleared transaction risk weights. (i) For a cleared transaction with a QCCP, a clearing member client national bank or Federal savings association must apply a risk weight of:
- (A) 2 percent if the collateral posted by the national bank or Federal savings association to the QCCP or clearing member is subject to an arrangement that prevents any loss to the clearing member client national bank or Federal savings association due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and any other clearing member clients of the clearing member; and the clearing member client national bank or Federal savings association has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from an event of default or from liquidation, insolvency or receivership proceedings) the relevant court and administrative authorities would find the arrangements to be legal, valid, binding and enforceable under the law of the relevant jurisdictions.
- (B) 4 percent, if the requirements of §3.132(b)(3)(i)(A) are not met.
- (ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member client national bank or Federal savings association must apply the risk weight applicable to the CCP under § 3.32.
- (4) Collateral. (i) Notwithstanding any other requirement of this section, collateral posted by a clearing member client national bank or Federal savings association that is held by a custodian (in its capacity as custodian) in a manner that is bankruptcy remote from the CCP, the custodian, clearing member, and other clearing member clients of the clearing member, is not subject

to a capital requirement under this section.

- (ii) A clearing member client national bank or Federal savings association must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member or a custodian in connection with a cleared transaction in accordance with requirements under §3.131.
- (c) Clearing member national bank or Federal savings association—(1) Risk-weighted assets for cleared transactions.
 (i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member national bank or Federal savings association must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (c)(2) of this section by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (c)(3) of this section.
- (ii) A clearing member national bank's or Federal savings association's total risk-weighted assets for cleared transactions is the sum of the riskweighted asset amounts for all of its cleared transactions.
- (2) Trade exposure amount. A clearing member national bank or Federal savings association must calculate its trade exposure amount for a cleared transaction as follows:
- (i) For a cleared transaction that is a derivative contract or a netting set of derivative contracts, trade exposure amount equals the EAD calculated using the methodology used to calculate EAD for OTC derivative contracts set forth in §3.132(c) or §3.132(d), plus the fair value of the collateral posted by the clearing member national bank or Federal savings association and held by the CCP in a manner that is not bankruptcy remote. When the clearing member national bank or Federal savings association calculates EAD for the cleared transaction using the methodology in §3.132(d), EAD equals EAD_{unstressed}.
- (ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals the EAD calculated under §§ 3.132(b)(2), (b)(3), or (d), plus the fair value of the collateral posted by the clearing member national bank

or Federal savings association and held by the CCP in a manner that is not bankruptcy remote. When the clearing member national bank or Federal savings association calculates EAD for the cleared transaction under §3.132(d), EAD equals EAD_{unstressed}.

- (3) Cleared transaction risk weights. (i) A clearing member national bank or Federal savings association must apply a risk weight of 2 percent to the trade exposure amount for a cleared transaction with a QCCP.
- (ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member national bank or Federal savings association must apply the risk weight applicable to the CCP according to §3.32.
- (4) Collateral. (i) Notwithstanding any other requirement of this section, collateral posted by a clearing member national bank or Federal savings association that is held by a custodian in a manner that is bankruptcy remote from the CCP is not subject to a capital requirement under this section.
- (ii) A clearing member national bank or Federal savings association must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member or a custodian in connection with a cleared transaction in accordance with requirements under § 3.131
- (d) Default fund contributions—(1) General requirement. A clearing member national bank or Federal savings associa-

tion must determine the risk-weighted asset amount for a default fund contribution to a CCP at least quarterly, or more frequently if, in the opinion of the national bank or Federal savings association or the OCC, there is a material change in the financial condition of the CCP.

- (2) Risk-weighted asset amount for default fund contributions to non-qualifying CCPs. A clearing member national bank's or Federal savings association's risk-weighted asset amount for default fund contributions to CCPs that are not QCCPs equals the sum of such default fund contributions multiplied by 1,250 percent or an amount determined by the OCC, based on factors such as size, structure and membership characteristics of the CCP and riskiness of its transactions, in cases where such default fund contributions may be unlimited.
- (3) Risk-weighted asset amount for default fund contributions to QCCPs. A clearing member national bank's or Federal savings association's risk-weighted asset amount for default fund contributions to QCCPs equals the sum of its capital requirement, K_{CM} for each QCCP, as calculated under the methodology set forth in paragraph (d)(3)(i) of this section (Method 1), multiplied by 1,250 percent or paragraph (d)(3)(iv) of this section (Method 2).
- (i) Method 1. The hypothetical capital requirement of a QCCP (K_{CCP}) equals:

$$K_{CCP} = \sum_{clearing member i} \max_{i} (EBRM_{i} - VM_{i} - IM_{i} - DF_{i}; 0) \times RW \times 0.08$$

Where

(A) EBRM $_{\rm i}$ = the EAD for each transaction cleared through the QCCP by clearing member i, calculated using the methodology used to calculate EAD for OTC derivative contracts set forth in §3.132(c)(5) and §3.132.(c)(6) or the methodology used to calculate EAD for repo-style transactions set forth in §3.132(b)(2) for repo-style transactions, provided that:

(1) For purposes of this section, when calculating the EAD, the national bank or Federal savings association may re-

place the formula provided in $\S3.132(c)(6)(ii)$ with the following formula:

Anet = (0.15 \times $A_{gross})$ + (0.85 \times NGR \times $A_{gross});$ and

(2) For option derivative contracts that are cleared transactions, the PFE described in §3.132(c)(5) must be adjusted by multiplying the notional principal amount of the derivative contract by the appropriate conversion factor in Table 2 to §3.132 and the absolute value of the option's delta, that is, the ratio of the change in the value of

the derivative contract to the corresponding change in the price of the underlying asset.

- (3) For repo-style transactions, when applying §3.132(b)(2), the national bank or Federal savings association must use the methodology in §3.132(b)(2)(ii).
- (B) VM_i = any collateral posted by clearing member i to the QCCP that it is entitled to receive from the QCCP but has not yet received, and any collateral that the QCCP has actually received from clearing member i;
- (C) IM_i = the collateral posted as initial margin by clearing member i to the QCCP;
- (D) DF_i = the funded portion of clearing member i's default fund contribution that will be applied to reduce the QCCP's loss upon a default by clearing member i; and

- (E) RW = 20 percent, except when the OCC has determined that a higher risk weight is more appropriate based on the specific characteristics of the QCCP and its clearing members; and
- (F) Where a QCCP has provided its K_{CCP} , a national bank or Federal savings association must rely on such disclosed figure instead of calculating K_{CCP} under this paragraph (d), unless the national bank or Federal savings association determines that a more conservative figure is appropriate based on the nature, structure, or characteristics of the QCCP.
- (ii) For a national bank or Federal savings association that is a clearing member of a QCCP with a default fund supported by funded commitments, K_{CM} equals:

$$K_{CM_i} = \left(1 + \beta \cdot \frac{N}{N - 2}\right) \cdot \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

$$K_{CM}^{*} = \begin{cases} c_{2} \cdot \mu \cdot \left(K_{CCP} - DF^{'}\right) + c_{2} \cdot DF_{CM}^{'} & if & DF^{'} < K_{CCP} & (i) \\ c_{2} \cdot \left(K_{CCP} - DF_{CCP}\right) + c_{1} \cdot \left(DF^{'} - K_{CCP}\right) & if & DF_{CCP} < K_{CCP} \leq DF^{'} & (ii) \\ c_{1} \cdot DF_{CM}^{'} & if & K_{CCP} \leq DF_{CCP} & (iii) \end{cases}$$

Where

(A)
$$\beta = \frac{A_{Net,1} + A_{Net,2}}{\sum_{i} A_{Net,i}}$$

Subscripts 1 and 2 denote the clearing members with the two largest A_{Net} values. For purposes of this section, for cleared transactions that are derivatives, A_{Net} is defined using the definition set forth in ...132(c)(6)(ii) and for cleared transactions that are repo-style transactions, A_{Net} is the EAD equation max $\{0, [(\Sigma E - \Sigma C) + \Sigma (E_s \times H_s) + \Sigma (Efx)]\}$ from ...132(b)(2(ii)) using the methodology in ...132(b)(2)(ii);

- (B) N = the number of clearing members in the QCCP;
- (C) DF_{CCP} = the QCCP's own funds and other financial resources that would be used to cover its losses before clearing members' default fund contributions are used to cover losses;
- (D) DF_{CM} = Funded default fund contributions from all clearing members and any other clearing member contributed financial resources that are available to absorb mutualized QCCP losses;
 - (E) $DF = DF_{CCP} + DF_{CM}$ (that is, the total funded default fund contribution);
- (F) $\overline{DF_i}$ = Average $\overline{DF_i}$ = the average funded default fund contribution from an individual clearing member;

(G) $DF_{CM}^{\cdot} = DF_{CM} - 2 \cdot \overline{DF_i} = \sum_i DF_i - 2 \cdot \overline{DF_i}$ (that is, the funded default fund

contribution from surviving clearing members assuming that two average clearing members have defaulted and their default fund contributions and initial margins have been used to absorb the resulting losses);

(H)
$$DF' = DF_{CCP} + DF_{CM} = DF - 2 \cdot \overline{DF_{DF}}$$

(that is, the total funded default fund contributions from the QCCP and the surviving clearing members that are available to mutualize losses, assuming that two average clearing members have defaulted);

(I)
$$c_1 = Max \left\{ \frac{1.6\%}{(DF'/K_{CCP})^{0.3}}; 0.16\% \right\}$$

(that is, a decreasing capital factor, between 1.6 percent and .16 percent, applied to the excess funded default funds provided by clearing members);

- (J) $c_2 = 100$ percent; and
- (K) μ = 1.2;
- (iii) For a [BANK] that is a clearing member of a QCCP with a default fund supported by unfunded commitments, K_{CM} equals:

$$K_{CM_i} = \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

Where:

- (A) DF_i = the national bank's or Federal savings association's unfunded commitment to the default fund;
- (B) DF_{CM} = the total of all clearing members' unfunded commitments to the default fund; and
- (C) K^*_{CM} as defined in paragraph (d)(3)(ii) of this section.

(D) For a national bank or Federal savings association that is a clearing member of a QCCP with a default fund supported by unfunded commitments and that is unable to calculate $K_{\rm CM}$ using the methodology described above in this paragraph (d)(3)(iii), $K_{\rm CM}$ equals:

$$K_{CM_i} = \frac{IM_i}{IM_{CM}} \cdot K_{CM}^*$$

Where:

- (1) IM_i = the national bank's or Federal savings association's initial margin posted to the QCCP;
- (2) IM_{CM} = the total of initial margin posted to the QCCP; and
- (3) $K*_{CM}$ as defined above in this paragraph (d)(3)(iii).
- (iv) *Method 2.* A clearing member national bank's or Federal savings association's risk-weighted asset amount for its default fund contribution to a QCCP, RWA_{DF}, equals:

 $RWA_{DF} = Min \{12.5 * DF; 0.18 * TE\}$

Where:

- (A) TE = the national bank's or Federal savings association's trade exposure amount to the QCCP calculated according to section 133(c)(2);
- (B) DF = the funded portion of the national bank's or Federal savings association's default fund contribution to the QCCP.
- (v) Total risk-weighted assets for default fund contributions. Total risk-weighted assets for default fund contributions is the sum of a clearing member national bank's or Federal savings association's risk-weighted assets for all of its default fund contributions to all CCPs of which the national bank or Federal savings association is a clearing member.

§ 3.134 Guarantees and credit derivatives: PD substitution and LGD adjustment approaches.

- (a) *Scope*. (1) This section applies to wholesale exposures for which:
- (i) Credit risk is fully covered by an eligible guarantee or eligible credit derivative; or
- (ii) Credit risk is covered on a pro rata basis (that is, on a basis in which the national bank or Federal savings association and the protection provider share losses proportionately) by an eligible guarantee or eligible credit derivative.
- (2) Wholesale exposures on which there is a tranching of credit risk (reflecting at least two different levels of seniority) are securitization exposures subject to §3.141 through §3.145.
- (3) A national bank or Federal savings association may elect to recognize the credit risk mitigation benefits of an eligible guarantee or eligible credit

- derivative covering an exposure described in paragraph (a)(1) of this section by using the PD substitution approach or the LGD adjustment approach in paragraph (c) of this section or, if the transaction qualifies, using the double default treatment in §3.135. A national bank's or Federal savings association's PD and LGD for the hedged exposure may not be lower than the PD and LGD floors described in §3.131(d)(2) and (d)(3).
- (4) If multiple eligible guarantees or eligible credit derivatives cover a single exposure described in paragraph (a)(1) of this section, a national bank or Federal savings association may treat the hedged exposure as multiple separate exposures each covered by a single eligible guarantee or eligible credit derivative and may calculate a separate risk-based capital requirement for each separate exposure as described in paragraph (a)(3) of this section.
- (5) If a single eligible guarantee or eligible credit derivative covers multiple hedged wholesale exposures described in paragraph (a)(1) of this section, a national bank or Federal savings association must treat each hedged exposure as covered by a separate eligible guarantee or eligible credit derivative and must calculate a separate risk-based capital requirement for each exposure as described in paragraph (a)(3) of this section.
- (6) A national bank or Federal savings association must use the same risk parameters for calculating ECL as it uses for calculating the risk-based capital requirement for the exposure.
- (b) Rules of recognition. (1) A national bank or Federal savings association may only recognize the credit risk mitigation benefits of eligible guarantees and eligible credit derivatives.
- (2) A national bank or Federal savings association may only recognize the credit risk mitigation benefits of an eligible credit derivative to hedge an exposure that is different from the credit derivative's reference exposure used for determining the derivative's cash settlement value, deliverable obligation, or occurrence of a credit event if.

- (i) The reference exposure ranks *pari* passu (that is, equally) with or is junior to the hedged exposure; and
- (ii) The reference exposure and the hedged exposure are exposures to the same legal entity, and legally enforceable cross-default or cross-acceleration clauses are in place to assure payments under the credit derivative are triggered when the obligor fails to pay under the terms of the hedged exposure.
- (c) Risk parameters for hedged exposures—(1) PD substitution approach—(i) Full coverage. If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the EAD of the hedged exposure, a national bank or Federal savings association may recognize the guarantee or credit derivative in determining the national bank's or Federal savings association's risk-based capital requirement for the hedged exposure by substituting the PD associated with the rating grade of the protection provider for the PD associated with the rating grade of the obligor in the risk-based capital formula applicable to the guarantee or credit derivative in Table 1 of §3.131 and using the appropriate LGD as described in paragraph (c)(1)(iii) of this section. If the national bank or Federal savings association determines that full substitution of the protection provider's PD leads to an inappropriate degree of risk mitigation, the national bank or Federal savings association may substitute a higher PD than that of the protection provider.
- (ii) Partial coverage. If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and P of the guarantee or credit derivative is less than the EAD of the hedged exposure, the national bank or Federal savings association must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.
- (A) The national bank or Federal savings association must calculate its risk-based capital requirement for the

- protected exposure under §3.131, where PD is the protection provider's PD, LGD is determined under paragraph (c)(1)(iii) of this section, and EAD is P. If the national bank or Federal savings association determines that full substitution leads to an inappropriate degree of risk mitigation, the national bank or Federal savings association may use a higher PD than that of the protection provider.
- (B) The national bank or Federal savings association must calculate its risk-based capital requirement for the unprotected exposure under §3.131, where PD is the obligor's PD, LGD is the hedged exposure's LGD (not adjusted to reflect the guarantee or credit derivative), and EAD is the EAD of the original hedged exposure minus P.
- (C) The treatment in paragraph (c)(1)(ii) of this section is applicable when the credit risk of a wholesale exposure is covered on a partial pro rata basis or when an adjustment is made to the effective notional amount of the guarantee or credit derivative under paragraphs (d), (e), or (f) of this section
- (iii) LGD of hedged exposures. The LGD of a hedged exposure under the PD substitution approach is equal to:
- (A) The lower of the LGD of the hedged exposure (not adjusted to reflect the guarantee or credit derivative) and the LGD of the guarantee or credit derivative, if the guarantee or credit derivative provides the national bank or Federal savings association with the option to receive immediate payout upon triggering the protection; or
- (B) The LGD of the guarantee or credit derivative, if the guarantee or credit derivative does not provide the national bank or Federal savings association with the option to receive immediate payout upon triggering the protection.
- (2) LGD adjustment approach. (i) Full coverage. If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the EAD of the hedged exposure, the national bank's or Federal savings association's risk-

based capital requirement for the hedged exposure is the greater of:

- (A) The risk-based capital requirement for the exposure as calculated under §3.131, with the LGD of the exposure adjusted to reflect the guarantee or credit derivative; or
- (B) The risk-based capital requirement for a direct exposure to the protection provider as calculated under §3.131, using the PD for the protection provider, the LGD for the guarantee or credit derivative, and an EAD equal to the EAD of the hedged exposure.
- (ii) Partial coverage. If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is less than the EAD of the hedged exposure, the national bank or Federal savings association must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.
- (A) The national bank's or Federal savings association's risk-based capital requirement for the protected exposure would be the greater of:
- (1) The risk-based capital requirement for the protected exposure as calculated under §3.131, with the LGD of the exposure adjusted to reflect the guarantee or credit derivative and EAD set equal to P; or
- (2) The risk-based capital requirement for a direct exposure to the guarantor as calculated under §3.131, using the PD for the protection provider, the LGD for the guarantee or credit derivative, and an EAD set equal to P.
- (B) The national bank or Federal savings association must calculate its risk-based capital requirement for the unprotected exposure under §3.131, where PD is the obligor's PD, LGD is the hedged exposure's LGD (not adjusted to reflect the guarantee or credit derivative), and EAD is the EAD of the original hedged exposure minus P.
- (3) *M* of hedged exposures. For purposes of this paragraph (c), the M of the hedged exposure is the same as the M of the exposure if it were unhedged.
- (d) Maturity mismatch. (1) A national bank or Federal savings association that recognizes an eligible guarantee

- or eligible credit derivative in determining its risk-based capital requirement for a hedged exposure must adjust the effective notional amount of the credit risk mitigant to reflect any maturity mismatch between the hedged exposure and the credit risk mitigant.
- (2) A maturity mismatch occurs when the residual maturity of a credit risk mitigant is less than that of the hedged exposure(s).
- (3) The residual maturity of a hedged exposure is the longest possible remaining time before the obligor is scheduled to fulfil its obligation on the exposure. If a credit risk mitigant has embedded options that may reduce its term, the national bank or Federal savings association (protection purchaser) must use the shortest possible residual maturity for the credit risk mitigant. If a call is at the discretion of the protection provider, the residual maturity of the credit risk mitigant is at the first call date. If the call is at the discretion of the national bank or Federal savings association (protection purchaser), but the terms of the arrangement at origination of the credit risk mitigant contain a positive incentive for the national bank or Federal savings association to call the transaction before contractual maturity, the remaining time to the first call date is the residual maturity of the credit risk mitigant.26
- (4) A credit risk mitigant with a maturity mismatch may be recognized only if its original maturity is greater than or equal to one year and its residual maturity is greater than three months.
- (5) When a maturity mismatch exists, the national bank or Federal savings association must apply the following adjustment to the effective notional amount of the credit risk mitigant:

$$P_m = E \times (t - 0.25)/(T - 0.25),$$

where:

²⁶ For example, where there is a step-up in cost in conjunction with a call feature or where the effective cost of protection increases over time even if credit quality remains the same or improves, the residual maturity of the credit risk mitigant will be the remaining time to the first call.

- (i) P_m = effective notional amount of the credit risk mitigant, adjusted for maturity mismatch:
- (ii) E = effective notional amount of the credit risk mitigant:
- (iii) t = the lesser of T or the residual maturity of the credit risk mitigant, expressed in years; and
- (iv) T = the lesser of five or the residual maturity of the hedged exposure, expressed in years.
- (e) Credit derivatives without restructuring as a credit event. If a national bank or Federal savings association recognizes an eligible credit derivative that does not include as a credit event a restructuring of the hedged exposure involving forgiveness or postponement of principal, interest, or fees that results in a credit loss event (that is, charge-off, specific provision, or other similar debit to the profit and loss account), the national bank or Federal savings association must apply the following adjustment to the effective notional amount of the credit derivative:

 $P_r = P_m \times 0.60$,

where:

- (1) P_r = effective notional amount of the credit risk mitigant, adjusted for lack of restructuring event (and maturity mismatch, if applicable); and
- (2) P_m = effective notional amount of the credit risk mitigant adjusted for maturity mismatch (if applicable).
- (f) Currency mismatch. (1) If a national bank or Federal savings association recognizes an eligible guarantee or eligible credit derivative that is denominated in a currency different from that in which the hedged exposure is denominated, the national bank or Federal savings association must apply the following formula to the effective notional amount of the guarantee or credit derivative:

 $P_c = P_{r x} (1 - H_{FX}),$

where:

- (i) P_c = effective notional amount of the credit risk mitigant, adjusted for currency mismatch (and maturity mismatch and lack of restructuring event, if applicable);
- (ii) P_r = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch and lack of restructuring event, if applicable); and

- (iii) H_{FX} = haircut appropriate for the currency mismatch between the credit risk mitigant and the hedged exposure.
- (2) A national bank or Federal savings association must set $H_{\rm FX}$ equal to 8 percent unless it qualifies for the use of and uses its own internal estimates of foreign exchange volatility based on a ten-business-day holding period and daily marking-to-market and remargining. A national bank or Federal savings association qualifies for the use of its own internal estimates of foreign exchange volatility if it qualifies for:
- (i) The own-estimates haircuts in §3.132(b)(2)(iii);
- (ii) The simple VaR methodology in §3.132(b)(3); or
- (iii) The internal models methodology in §3.132(d).
- (3) A national bank or Federal savings association must adjust H_{FX} calculated in paragraph (f)(2) of this section upward if the national bank or Federal savings association revalues the guarantee or credit derivative less frequently than once every ten business days using the square root of time formula provided in $\S 3.132(b)(2)(iii)(A)(2)$.

§ 3.135 Guarantees and credit derivatives: double default treatment.

- (a) Eligibility and operational criteria for double default treatment. A national bank or Federal savings association may recognize the credit risk mitigation benefits of a guarantee or credit derivative covering an exposure described in §3.134(a)(1) by applying the double default treatment in this section if all the following criteria are satisfied:
- (1) The hedged exposure is fully covered or covered on a pro rata basis by:
- (i) An eligible guarantee issued by an eligible double default guarantor; or
- (ii) An eligible credit derivative that meets the requirements of §3.134(b)(2) and that is issued by an eligible double default guarantor.
- (2) The guarantee or credit derivative is:
- (i) An uncollateralized guarantee or uncollateralized credit derivative (for example, a credit default swap) that provides protection with respect to a single reference obligor; or

- (ii) An nth-to-default credit derivative (subject to the requirements of §3.142(m).
- (3) The hedged exposure is a whole-sale exposure (other than a sovereign exposure).
- (4) The obligor of the hedged exposure is not:
- (i) An eligible double default guarantor or an affiliate of an eligible double default guarantor; or
 - (ii) An affiliate of the guarantor.
- (5) The national bank or Federal savings association does not recognize any credit risk mitigation benefits of the guarantee or credit derivative for the hedged exposure other than through application of the double default treatment as provided in this section.
- (6) The national bank or Federal savings association has implemented a process (which has received the prior, written approval of the OCC) to detect excessive correlation between the creditworthiness of the obligor of the hedged exposure and the protection provider. If excessive correlation is present, the national bank or Federal savings association may not use the double default treatment for the hedged exposure.
- (b) Full coverage. If a transaction meets the criteria in paragraph (a) of this section and the protection amount (P) of the guarantee or credit derivative is at least equal to the EAD of the hedged exposure, the national bank or Federal savings association may determine its risk-weighted asset amount for the hedged exposure under paragraph (e) of this section.
- (c) Partial coverage. If a transaction meets the criteria in paragraph (a) of

- this section and the protection amount (P) of the guarantee or credit derivative is less than the EAD of the hedged exposure, the national bank or Federal savings association must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize double default treatment on the protected portion of the exposure:
- (1) For the protected exposure, the national bank or Federal savings association must set EAD equal to P and calculate its risk-weighted asset amount as provided in paragraph (e) of this section; and
- (2) For the unprotected exposure, the national bank or Federal savings association must set EAD equal to the EAD of the original exposure minus P and then calculate its risk-weighted asset amount as provided in §3.131.
- (d) Mismatches. For any hedged exposure to which a national bank or Federal savings association applies double default treatment under this part, the national bank or Federal savings association must make applicable adjustments to the protection amount as required in §3.134(d), (e), and (f).
- (e) The double default dollar risk-based capital requirement. The dollar risk-based capital requirement for a hedged exposure to which a national bank or Federal savings association has applied double default treatment is $K_{\rm DD}$ multiplied by the EAD of the exposure. $K_{\rm DD}$ is calculated according to the following formula:

 $K_{DD} = K_o \times (0.15 + 160 \times PD_g),$

Where:

(1)

$$K_{O} = LGD_{g} \times \left[N \left(\frac{N^{-1}(PD_{o}) + N^{-1}(0.999)\sqrt{\rho_{os}}}{\sqrt{1 - \rho_{os}}} \right) - PD_{o} \right] \times \left[\frac{1 + (M - 2.5) \times b}{1 - 1.5 \times b} \right]$$

- (2) $PD_g = PD$ of the protection provider
- (3) PD_o = PD of the obligor of the hedged exposure.
 - (4) LGD_g =
- (i) The lower of the LGD of the hedged exposure (not adjusted to re-

flect the guarantee or credit derivative) and the LGD of the guarantee or credit derivative, if the guarantee or credit derivative provides the national bank or Federal savings association with the option to receive immediate payout on triggering the protection; or

- (ii) The LGD of the guarantee or credit derivative, if the guarantee or credit derivative does not provide the national bank or Federal savings association with the option to receive immediate payout on triggering the protection; and
- (5) ρ_{os} (asset value correlation of the obligor) is calculated according to the appropriate formula for (R) provided in Table 1 in §3.131, with PD equal to PD_o.
- (6) b (maturity adjustment coefficient) is calculated according to the formula for b provided in Table 1 in $\S 3.131$, with PD equal to the lesser of PD_o and PD_e; and
- (7) M (maturity) is the effective maturity of the guarantee or credit derivative, which may not be less than one year or greater than five years.

§ 3.136 Unsettled transactions.

- (a) *Definitions*. For purposes of this section:
- (1) Delivery-versus-payment (DvP) transaction means a securities or commodities transaction in which the buyer is obligated to make payment only if the seller has made delivery of the securities or commodities and the seller is obligated to deliver the securities or commodities only if the buyer has made payment.
- (2) Payment-versus-payment (PvP) transaction means a foreign exchange transaction in which each counterparty is obligated to make a final transfer of one or more currencies only if the other counterparty has made a final transfer of one or more currencies.
- (3) A transaction has a normal settlement period if the contractual settlement period for the transaction is equal to or less than the market standard for the instrument underlying the transaction and equal to or less than five business days.
- (4) The positive current exposure of a national bank or Federal savings association for a transaction is the difference between the transaction value at the agreed settlement price and the current market price of the transaction, if the difference results in a credit exposure of the national bank or Federal savings association to the counterparty.

- (b) *Scope.* This section applies to all transactions involving securities, foreign exchange instruments, and commodities that have a risk of delayed settlement or delivery. This section does not apply to:
- (1) Cleared transactions that are subject to daily marking-to-market and daily receipt and payment of variation margin:
- (2) Repo-style transactions, including unsettled repo-style transactions (which are addressed in §§ 3.131 and 132);
- (3) One-way cash payments on OTC derivative contracts (which are addressed in §§ 3. 131 and 132); or
- (4) Transactions with a contractual settlement period that is longer than the normal settlement period (which are treated as OTC derivative contracts and addressed in §§ 3.131 and 132).
- (c) System-wide failures. In the case of a system-wide failure of a settlement or clearing system, or a central counterparty, the OCC may waive risk-based capital requirements for unsettled and failed transactions until the situation is rectified.
- (d) Delivery-versus-payment (DvP) and payment-versus-payment (PvP) transactions. A national bank or Federal savings association must hold riskbased capital against any DvP or PvP transaction with a normal settlement period if the national bank's or Federal savings association's counterparty has not made delivery or payment within five business days after the settlement date. The national bank or Federal savings association must determine its risk-weighted asset amount for such a transaction by multiplying the positive current exposure of the transaction for the national bank or Federal savings association by the appropriate risk weight in Table 1 to §3.136.

TABLE 1 TO § 3.136—RISK WEIGHTS FOR UNSETTLED DVP AND PVP TRANSACTIONS

Number of business days after contractual settlement date	Risk weight to be applied to positive current exposure (in percent)		
From 5 to 15	100		
From 16 to 30	625		
From 31 to 45	937.5		
46 or more	1,250		

- (e) Non-DvP/non-PvP (non-deliveryversus-payment/non-payment-versus-payment) transactions. (1) A national bank or Federal savings association must hold risk-based capital against any non-DvP/non-PvP transaction with a normal settlement period if the national bank or Federal savings association has delivered cash, securities, commodities, or currencies to its counterparty but has not received its corresponding deliverables by the end of the same business day. The national bank or Federal savings association must continue to hold risk-based capital against the transaction until the national bank or Federal savings association has received its corresponding deliverables.
- (2) From the business day after the national bank or Federal savings association has made its delivery until five business days after the counterparty delivery is due, the national bank or Federal savings association must calculate its risk-based capital requirement for the transaction by treating the current fair value of the deliverables owed to the national bank or Federal savings association as a wholesale exposure.
- (i) A national bank or Federal savings association may use a 45 percent LGD for the transaction rather than estimating LGD for the transaction provided the national bank or Federal savings association uses the 45 percent LGD for all transactions described in §3.135(e)(1) and (e)(2).
- (ii) A national bank or Federal savings association may use a 100 percent risk weight for the transaction provided the national bank or Federal savings association uses this risk weight for all transactions described in §§ 3.135(e)(1) and (e)(2).
- (3) If the national bank or Federal savings association has not received its deliverables by the fifth business day after the counterparty delivery was due, the national bank or Federal savings association must apply a 1,250 percent risk weight to the current fair value of the deliverables owed to the national bank or Federal savings association.
- (f) Total risk-weighted assets for unsettled transactions. Total risk-weighted assets for unsettled transactions is the

sum of the risk-weighted asset amounts of all DvP, PvP, and non-DvP/non-PvP transactions.

§§ 3.137-3.140 [Reserved]

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

§ 3.141 Operational criteria for recognizing the transfer of risk.

- (a) Operational criteria for traditional securitizations. A national bank or Federal savings association that transfers exposures it has originated or purchased to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of its risk-weighted assets only if each of the conditions in this paragraph (a) is satisfied. A national bank or Federal savings association that meets these conditions must hold risk-based capital against any securitization exposures it retains in connection with the securitization. A national bank or Federal savings association that fails to meet these conditions must hold riskbased capital against the transferred exposures as if they had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the transaction. The conditions are:
- (1) The exposures are not reported on the national bank's or Federal savings association's consolidated balance sheet under GAAP:
- (2) The national bank or Federal savings association has transferred to one or more third parties credit risk associated with the underlying exposures;
- (3) Any clean-up calls relating to the securitization are eligible clean-up calls; and
 - (4) The securitization does not:
- (i) Include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit; and
- (ii) Contain an early amortization provision.
- (b) Operational criteria for synthetic securitizations. For synthetic securitizations, a national bank or Federal savings association may recognize for risk-based capital purposes under this subpart the use of a credit

risk mitigant to hedge underlying exposures only if each of the conditions in this paragraph (b) is satisfied. A national bank or Federal savings association that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the synthetic securitization. A national bank or Federal savings association that fails to meet these conditions or chooses not to recognize the credit risk mitigant for purposes of this section must hold riskbased capital under this subpart against the underlying exposures as if they had not been synthetically securitized. The conditions are:

- (1) The credit risk mitigant is:
- (i) Financial collateral; or
- (ii) A guarantee that meets all of the requirements of an eligible guarantee in §3.2 except for paragraph (3) of the definition; or
- (iii) A credit derivative that meets all of the requirements of an eligible credit derivative except for paragraph (3) of the definition of eligible guarantee in §3.2.
- (2) The national bank or Federal savings association transfers credit risk associated with the underlying exposures to third parties, and the terms and conditions in the credit risk mitigants employed do not include provisions that:
- (i) Allow for the termination of the credit protection due to deterioration in the credit quality of the underlying exposures:
- (ii) Require the national bank or Federal savings association to alter or replace the underlying exposures to improve the credit quality of the underlying exposures;
- (iii) Increase the national bank's or Federal savings association's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;
- (iv) Increase the yield payable to parties other than the national bank or Federal savings association in response to a deterioration in the credit quality of the underlying exposures; or
- (v) Provide for increases in a retained first loss position or credit enhancement provided by the national bank or Federal savings association after the inception of the securitization;

- (3) The national bank or Federal savings association obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions; and
- (4) Any clean-up calls relating to the securitization are eligible clean-up calls.
- (c) Due diligence requirements for securitization exposures. (1) Except for exposures that are deducted from common equity tier 1 capital and exposures subject to §3.142(k), if a national bank or Federal savings association is unable to demonstrate to the satisfaction of the OCC a comprehensive understanding of the features securitization exposure that would materially affect the performance of the exposure, the national bank or Federal savings association must assign a 1,250 weight percent risk securitization exposure. The national bank's or Federal savings association's analysis must be commensurate with the complexity of the securitization exposure and the materiality of the position in relation to regulatory capital according to this part.
- (2) A national bank or Federal savings association must demonstrate its comprehensive understanding of a securitization exposure under paragraph (c)(1) of this section, for each securitization exposure by:
- (i) Conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure and document such analysis within three business days after acquiring the exposure, considering:
- (A) Structural features of the securitization that would materially impact the performance of the exposure, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the performance of organizations that service the position, and deal-specific definitions of default;
- (B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score

or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);

- (C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and
- (D) For resecuritization exposures, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and
- (ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under this section for each securitization exposure.

§ 3.142 Risk-weighted assets for securitization exposures.

- (a) *Hierarchy of approaches*. Except as provided elsewhere in this section and in §3.141:
- (1) A national bank or Federal savings association must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from a securitization and must apply a 1,250 percent risk weight to the portion of any CEIO that does not constitute after tax gain-on-sale;
- (2) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section, the national bank or Federal savings association must apply the supervisory formula approach in §3.143 to the exposure if the national bank or Federal savings association and the exposure qualify for the supervisory formula approach according to §3.143(a);
- (3) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section and does not qualify for the supervisory formula approach, the national bank or Federal savings association may apply the simplified supervisory formula approach under §3.144:
- (4) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section, does not qualify for the

- supervisory formula approach in §3.143, and the national bank or Federal savings association does not apply the simplified supervisory formula approach in §3.144, the national bank or Federal savings association must apply a 1,250 percent risk weight to the exposure; and
- (5) If a securitization exposure is a derivative contract (other than protection provided by a national bank or Federal savings association in the form of a credit derivative) that has a first priority claim on the cash flows from the underlying exposures (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments), a national bank or Federal savings association may choose to set the riskweighted asset amount of the exposure equal to the amount of the exposure as determined in paragraph (e) of this section rather than apply the hierarchy of approaches described in paragraphs (a)(1) through (4) of this section.
- (b) Total risk-weighted assets for securitization exposures. A national bank's or Federal savings association's total risk-weighted assets for securitization exposures is equal to the sum of its risk-weighted assets calculated using §§ 3.141 through 146.
- (c) Deductions. A national bank or Federal savings association may calculate any deduction from common equity tier 1 capital for a securitization exposure net of any DTLs associated with the securitization exposure.
- (d) Maximum risk-based capital requirement. Except as provided in §3.141(c), unless one or more underlying exposures does not meet the definition of a wholesale, retail, securitization, or equity exposure, the total risk-based capital requirement for all securitization exposures held by a single national bank or Federal savings association associated with a single securitization (excluding any risk-based capital requirements that relate to the national bank's or Federal savings association's gain-on-sale or CEIOs associated with the securitization) may not exceed the sum of:
- (1) The national bank's or Federal savings association's total risk-based capital requirement for the underlying

exposures calculated under this subpart as if the national bank or Federal savings association directly held the underlying exposures; and

- (2) The total ECL of the underlying exposures calculated under this subpart.
- (e) Exposure amount of a securitization exposure. (1) The exposure amount of an on-balance sheet securitization exposure that is not a repostyle transaction, eligible margin loan, OTC derivative contract, or cleared transaction is the national bank's or Federal savings association's carrying value.
- (2) Except as provided in paragraph (m) of this section, the exposure amount of an off-balance securitization exposure that is not an OTC derivative contract (other than a credit derivative), repo-style transaction, eligible margin loan, or cleared transaction (other than a credit derivative) is the notional amount of the exoff-balance-sheet posure. For an securitization exposure to an ABCP program, such as an eligible ABCP liquidity facility, the notional amount may be reduced to the maximum potential amount that the national bank or Federal savings association could be required to fund given the ABCP program's current underlying assets (calculated without regard to the current credit quality of those assets).
- (3) The exposure amount of a securitization exposure that is a repostyle transaction, eligible margin loan, or OTC derivative contract (other than a credit derivative) or cleared transaction (other than a credit derivative) is the EAD of the exposure as calculated in § 3.132 or § 3.133.
- (f) Overlapping exposures. If a national bank or Federal savings association has multiple securitization exposures that provide duplicative coverage of underlying exposures of securitization (such as when a national bank or Federal savings association provides a program-wide credit enhancement and multiple pool-specific liquidity facilities to an ABCP program), the national bank or Federal savings association is not required to hold duplicative risk-based capital against the overlapping position. Instead, the national bank or Federal

- savings association may assign to the overlapping securitization exposure the applicable risk-based capital treatment under this subpart that results in the highest risk-based capital requirement.
- (g) Securitizations of non-IRB exposures. Except as provided in §3.141(c), if a national bank or Federal savings association has a securitization exposure where any underlying exposure is not a wholesale exposure, retail exposure, securitization exposure, or equity exposure, the national bank or Federal savings association:
- (1) Must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization and apply a 1,250 percent risk weight to the portion of any CEIO that does not constitute gain-on-sale, if the national bank or Federal savings association is an originating national bank or Federal savings association;
- (2) May apply the simplified supervisory formula approach in §3.144 to the exposure, if the securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (g)(1) of this section;
- (3) Must assign a 1,250 percent risk weight to the exposure if the securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (g)(1) of this section, does not qualify for the supervisory formula approach in §3.143, and the national bank or Federal savings association does not apply the simplified supervisory formula approach in §3.144 to the exposure.
- (h) Implicit support. If a national bank or Federal savings association provides support to a securitization in excess of the national bank's or Federal savings association's contractual obligation to provide credit support to the securitization (implicit support):
- (1) The national bank or Federal savings association must calculate a risk-weighted asset amount for underlying exposures associated with the securitization as if the exposures had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization; and
- (2) The national bank or Federal savings association must disclose publicly:

- (i) That it has provided implicit support to the securitization; and
- (ii) The regulatory capital impact to the national bank or Federal savings association of providing such implicit support.
- (i) Undrawn portion of a servicer cash advance facility. (1) Notwithstanding any other provision of this subpart, a national bank or Federal savings association that is a servicer under an eligible servicer cash advance facility is not required to hold risk-based capital against potential future cash advance payments that it may be required to provide under the contract governing the facility.
- (2) For a national bank or Federal savings association that acts as a servicer, the exposure amount for a servicer cash advance facility that is not an eligible servicer cash advance facility is equal to the amount of all potential future cash advance payments that the national bank or Federal savings association may be contractually required to provide during the subsequent 12 month period under the contract governing the facility.
- (j) Interest-only mortgage-backed securities. Regardless of any other provisions in this part, the risk weight for a non-credit-enhancing interest-only mortgage-backed security may not be less than 100 percent.
- (k) Small-business loans and leases on personal property transferred with recourse. (1) Notwithstanding any other provisions of this subpart E, a national bank or Federal savings association that has transferred small-business loans and leases on personal property (small-business obligations) with recourse must include in risk-weighted assets only the contractual amount of retained recourse if all the following conditions are met:
- (i) The transaction is a sale under GAAP.
- (ii) The national bank or Federal savings association establishes and maintains, pursuant to GAAP, a non-capital reserve sufficient to meet the national bank's or Federal savings association's reasonably estimated liability under the recourse arrangement.
- (iii) The loans and leases are to businesses that meet the criteria for a small-business concern established by

- the Small Business Administration under section 3(a) of the Small Business Act (15 U.S.C. 632 *et seq.*); and
- (iv) The national bank or Federal savings association is well-capitalized, as defined in 12 CFR 6.4. For purposes of determining whether a national bank or Federal savings association is well capitalized for purposes of this paragraph (k), the national bank's or Federal savings association's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.
- (2) The total outstanding amount of recourse retained by a national bank or Federal savings association on transfers of small-business obligations subject to paragraph (k)(1) of this section cannot exceed 15 percent of the national bank's or Federal savings association's total capital.
- (3) If a national bank or Federal savings association ceases to be well capitalized or exceeds the 15 percent capital limitation in paragraph (k)(2) of this section, the preferential capital treatment specified in paragraph (k)(1) of this section will continue to apply to any transfers of small-business obligations with recourse that occurred during the time that the national bank or Federal savings association was well capitalized and did not exceed the capital limit.
- (4) The risk-based capital ratios of a national bank or Federal savings association must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.
- (1) Nth-to-default credit derivatives—(1) Protection provider. A national bank or Federal savings association must determine a risk weight using the supervisory formula approach (SFA) pursuant to §3.143 or the simplified supervisory formula approach (SSFA) pursuant to §3.144 for an nth-to-default credit derivative in accordance with this paragraph (1). In the case of credit protection sold, a national bank or Federal savings association must determine its exposure in the nth-to-default

credit derivative as the largest notional amount of all the underlying exposures.

- (2) For purposes of determining the risk weight for an nth-to-default credit derivative using the SFA or the SSFA, the national bank or Federal savings association must calculate the attachment point and detachment point of its exposure as follows:
- (i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the national bank's or Federal savings association's exposure to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter A is expressed as a decimal value between zero and one. For purposes of using the SFA to calculate the risk weight for its exposure in an nth-to-default credit derivative, parameter A must be set equal to the credit enhancement level (L) input to the SFA formula. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the national bank's or Federal savings association's exposure. In the case of a second-orsubsequent-to-default credit derivative, the smallest (n-1) risk-weighted asset amounts of the underlying exposure(s) are subordinated to the national bank's or Federal savings association's exposure.
- (ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the national bank's or Federal savings association's exposure in the nth-to-default credit derivative to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter W is expressed as a decimal value between zero and one. For purposes of the SFA, parameter D must be set to equal L plus the thickness of tranche T input to the SFA formula.
- (3) A national bank or Federal savings association that does not use the SFA or the SSFA to determine a risk weight for its exposure in an nth-to-default credit derivative must assign a risk weight of 1,250 percent to the exposure.
- (4) Protection purchaser—(i) First-todefault credit derivatives. A national bank or Federal savings association

- that obtains credit protection on a group of underlying exposures through a first-to-default credit derivative that meets the rules of recognition of §3.134(b) must determine its risk-based capital requirement under this subpart for the underlying exposures as if the national bank or Federal savings association synthetically securitized the underlying exposure with the lowest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures. A national bank or Federal savings association must calculate a risk-based capital requirement for counterparty credit risk according to §3.132 for a first-to-default credit derivative that does not meet the rules of recognition of §3.134(b).
- (ii) Second-or-subsequent-to-default credit derivatives. (A) A national bank or Federal savings association that obtains credit protection on a group of underlying exposures through a nth-to-default credit derivative that meets the rules of recognition of §3.134(b) (other than a first-to-default credit derivative) may recognize the credit risk mitigation benefits of the derivative only if:
- (1) The national bank or Federal savings association also has obtained credit protection on the same underlying exposures in the form of first-through-(n-1)-to-default credit derivatives; or
- (2) If n-1 of the underlying exposures have already defaulted.
- (B) If a national bank or Federal savings association satisfies the requirements of paragraph (1)(3)(ii)(A) of this section, the national bank or Federal savings association must determine its risk-based capital requirement for the underlying exposures as if the bank had only synthetically securitized the underlying exposure with the nth smallest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures.
- (C) A national bank or Federal savings association must calculate a risk-based capital requirement for counterparty credit risk according to §3.132 for a nth-to-default credit derivative that does not meet the rules of recognition of §3.134(b).

- (m) Guarantees and credit derivatives other than nth-to-default credit derivatives—(1) Protection provider. For a guarantee or credit derivative (other than an nth-to-default credit derivative) provided by a national bank or Federal savings association that covers the full amount or a pro rata share of a securitization exposure's principal and interest, the national bank or Federal savings association must risk weight the guarantee or credit derivative as if it holds the portion of the reference exposure covered by the guarantee or credit derivative.
- (2) Protection purchaser. (i) A national bank or Federal savings association that purchases an OTC credit derivative (other than an nth-to-default credit derivative) that is recognized under §3.145 as a credit risk mitigant (including via recognized collateral) is not required to compute a separate counterparty credit risk capital requirement under §3.131 in accordance with §3.132(c)(3).
- (ii) If a national bank or Federal savings association cannot, or chooses not to, recognize a purchased credit derivative as a credit risk mitigant under §3.145, the national bank or Federal savings association must determine the exposure amount of the credit derivative under §3.132(c).
- (A) If the national bank or Federal savings association purchases credit protection from a counterparty that is not a securitization SPE, the national bank or Federal savings association must determine the risk weight for the exposure according §3.131.
- (B) If the national bank or Federal savings association purchases the credit protection from a counterparty that is a securitization SPE, the national bank or Federal savings association must determine the risk weight for the exposure according to this section, including paragraph (a)(5) of this section for a credit derivative that has a first priority claim on the cash flows from

the underlying exposures of the securitization SPE (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments.

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§ 3.143 Supervisory formula approach (SFA).

- (a) Eligibility requirements. A national bank or Federal savings association must use the SFA to determine its risk-weighted asset amount for a securitization exposure if the national bank or Federal savings association can calculate on an ongoing basis each of the SFA parameters in paragraph (e) of this section.
- (b) *Mechanics*. The risk-weighted asset amount for a securitization exposure equals its SFA risk-based capital requirement as calculated under paragraph (c) and (d) of this section, multiplied by 12.5.
- (c) The SFA risk-based capital requirement. (1) If $K_{\rm IRB}$ is greater than or equal to L + T, an exposure's SFA risk-based capital requirement equals the exposure amount.
- (2) If K_{IRB} is less than or equal to L, an exposure's SFA risk-based capital requirement is UE multiplied by TP multiplied by the greater of:
- (i) $F \cdot T$ (where F is 0.016 for all securitization exposures); or
 - (ii) S[L + T] S[L].
- (3) If K_{IRB} is greater than L and less than L + T, the national bank or Federal savings association must apply a 1,250 percent risk weight to an amount equal to UE · TP (K_{IRB} -L), and the exposure's SFA risk-based capital requirement is UE multiplied by TP multiplied by the greater of:
- (i) $F\cdot (T-(K_{IRB}-L))$ (where F is 0.016 for all other securitization exposures); or
 - (ii) $S[L + T] S[K_{IRB}]$.
 - (d) The supervisory formula:

$$(1) \quad S[Y] = \begin{cases} Y & when \ Y \le K_{IRB} \\ K_{IRB} + K[Y] - K[K_{IRB}] + \frac{d \cdot K_{IRB}}{20} (1 - e^{\frac{20(K_{IRB} - Y)}{K_{IRB}}}) & when \ Y > K_{IRB} \end{cases}$$

(2)
$$K[Y] = (1-h) \cdot [(1-\beta[Y;a,b]) \cdot Y + \beta[Y;a+1,b] \cdot c]$$

(3)
$$h = \left(1 - \frac{K_{IRB}}{EWALGD}\right)^N$$

- $(4) \quad a = g \cdot c$
- (5) $b = g \cdot (1 c)$

(6)
$$c = \frac{K_{IRB}}{1 - h}$$

(7)
$$g = \frac{(1-c)\cdot c}{f} - 1$$

(8)
$$f = \frac{v + K_{IRB}^2}{1 - h} - c^2 + \frac{(1 - K_{IRB}) \cdot K_{IRB} - v}{(1 - h) \cdot 1000}$$

(9)
$$v = K_{IRB} \cdot \frac{(EWALGD - K_{IRB}) + .25 \cdot (1 - EWALGD)}{N}$$

(10)
$$d = 1 - (1 - h) \cdot (1 - \beta [K_{IRB}; a, b])$$

- (11) In these expressions, β [Y; a, b] refers to the cumulative beta distribution with parameters a and b evaluated at Y. In the case where N = 1 and EWALGD = 100 percent, S[Y] in formula (1) must be calculated with K[Y] set equal to the product of K_{IRB} and Y, and d set equal to 1 K_{IRB}.
- (e) SFA parameters. For purposes of the calculations in paragraphs (c) and (d) of this section:
- (1) Amount of the underlying exposures (UE). UE is the EAD of any underlying exposures that are wholesale and retail exposures (including the amount of any funded spread accounts, cash collateral accounts, and other similar funded credit enhancements) plus the amount of any underlying exposures that are securitization exposures (as defined in §3.142(e)) plus the adjusted carrying value of any underlying exposures that

are equity exposures (as defined in §3.151(b)).

- (2) Tranche percentage (TP). TP is the ratio of the amount of the national bank's or Federal savings association's securitization exposure to the amount of the tranche that contains the securitization exposure.
- (3) Capital requirement on underlying exposures (K_{IRB}) . (i) K_{IRB} is the ratio of:
- (A) The sum of the risk-based capital requirements for the underlying exposures plus the expected credit losses of

the underlying exposures (as determined under this subpart E as if the underlying exposures were directly held by the national bank or Federal savings association); to

- (B) UE.
- (ii) The calculation of K_{IRB} must reflect the effects of any credit risk mitigant applied to the underlying exposures (either to an individual underlying exposure, to a group of underlying exposures, or to all of the underlying exposures).
- (iii) All assets related to the securitization are treated as underlying exposures, including assets in a reserve account (such as a cash collateral account).
- (4) Credit enhancement level (L). (i) L is the ratio of:
- (A) The amount of all securitization exposures subordinated to the tranche that contains the national bank's or Federal savings association's securitization exposure; to
 - (B) UE.
- (ii) A national bank or Federal savings association must determine L before considering the effects of any tranche-specific credit enhancements.
- (iii) Any gain-on-sale or CEIO associated with the securitization may not be included in L.
- (iv) Any reserve account funded by accumulated cash flows from the un-

derlying exposures that is subordinated to the tranche that contains the national bank's or Federal savings association's securitization exposure may be included in the numerator and denominator of L to the extent cash has accumulated in the account. Unfunded reserve accounts (that is, reserve accounts that are to be funded from future cash flows from the underlying exposures) may not be included in the calculation of L.

- (v) In some cases, the purchase price of receivables will reflect a discount that provides credit enhancement (for example, first loss protection) for all or certain tranches of the securitization. When this arises, L should be calculated inclusive of this discount if the discount provides credit enhancement for the securitization exposure.
- (5) *Thickness of tranche (T)*. T is the ratio of:
- (i) The amount of the tranche that contains the national bank's or Federal savings association's securitization exposure; to
 - (ii) UE.
- (6) Effective number of exposures (N).
 (i) Unless the national bank or Federal savings association elects to use the formula provided in paragraph (f) of this section,

$$N = \frac{(\sum_{i} EAD_{i})^{2}}{\sum_{i} EAD_{i}^{2}}$$

where EAD_i represents the EAD associated with the ith instrument in the underlying exposures.

- (ii) Multiple exposures to one obligor must be treated as a single underlying exposure.
- (iii) In the case of a resecuritization, the national bank or Federal savings

association must treat each underlying exposure as a single underlying exposure and must not look through to the originally securitized underlying exposures.

(7) Exposure-weighted average loss given default (EWALGD). EWALGD is calculated as:

$$EWALGD = \frac{\sum_{i} LGD_{i} \cdot EAD_{i}}{\sum_{i} EAD_{i}}$$

where LGD_i represents the average LGD associated with all exposures to the ith obligor. In the case of a resecuritization, an LGD of 100 percent must be assumed for the underlying exposures that are themselves securitization exposures.

- (f) Simplified method for computing N and EWALGD. (1) If all underlying exposures of a securitization are retail exposures, a national bank or Federal savings association may apply the SFA using the following simplifications:
 - (i) h = 0; and
 - (ii) v = 0.

- (2) Under the conditions in §§ 3.143(f)(3) and (f)(4), a national bank or Federal savings association may employ a simplified method for calculating N and EWALGD.
- (3) If C_1 is no more than 0.03, a national bank or Federal savings association may set EWALGD = 0.50 if none of the underlying exposures is a securitization exposure, or may set EWALGD = 1 if one or more of the underlying exposures is a securitization exposure, and may set N equal to the following amount:

$$N = \frac{1}{C_1 C_m + \left(\frac{C_m - C_1}{m - 1}\right) \max(1 - mC_1, 0)}$$

where:

- (i) C_m is the ratio of the sum of the amounts of the 'm' largest underlying exposures to UE; and
- (ii) The level of m is to be selected by the national bank or Federal savings association.
- (4) Alternatively, if only C_1 is available and C_1 is no more than 0.03, the national bank or Federal savings association may set EWALGD = 0.50 if none of the underlying exposures is a securitization exposure, or may set EWALGD = 1 if one or more of the underlying exposures is a securitization exposure and may set $N = 1/C_1$.

§ 3.144 Simplified supervisory formula approach (SSFA).

(a) General requirements for the SSFA. To use the SSFA to determine the risk weight for a securitization exposure, a national bank or Federal savings association must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters de-

- scribed in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. A national bank or Federal savings association that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the exposure.
- (b) SSFA parameters. To calculate the risk weight for a securitization exposure using the SSFA, a national bank or Federal savings association must have accurate information on the following five inputs to the SSFA calculation:
- (1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using subpart D of this part. K_G

is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of K_G equal to 0.08).

- (2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:
 - (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;
- (iii) In the process of foreclosure;
- (iv) Held as real estate owned;
- (v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:
- (A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or
- (B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or
 - (vi) Is in default.
- (3) Parameter A is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Except as provided in section 142(1) for nth-to-default credit derivatives, parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the national bank or Federal savings association to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the national bank's or Federal savings association's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

- (4) Parameter D is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Except as provided in section 142(1) for nth-to-default credit derivatives, parameter D equals parameter A plus the ratio of the current dollar amount of the securitization exposures that are pari passu with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.
- (5) A supervisory calibration parameter, p, is equal to 0.5 for securitization exposures that are not resecuritization exposures and equal to 1.5 for resecuritization exposures.
- (c) Mechanics of the SSFA. K_G and W are used to calculate KA, the augmented value of K_G, which reflects the observed credit quality of the underlying exposures. KA is defined in paragraph (d) of this section. The values of parameters A and D, relative to KA determine the risk weight assigned to a securitization exposure as described in paragraph (d) of this section. The risk weight assigned to a securitization exposure, or portion of a securitization exposure, as appropriate, is the larger of the risk weight determined in accordance with this paragraph (c), paragraph (d) of this section, and a risk weight of 20 percent.
- (1) When the detachment point, parameter D, for a securitization exposure is less than or equal to K_A , the exposure must be assigned a risk weight of 1,250 percent;
- (2) When the attachment point, parameter A, for a securitization exposure is greater than or equal to K_A , the national bank or Federal savings association must calculate the risk weight in accordance with paragraph (d) of this section:
- (3) When A is less than K_A and D is greater than K_A , the risk weight is a weighted-average of 1,250 percent and 1,250 percent times $K_{\rm SSFA}$ calculated in accordance with paragraph (d) of this section. For the purpose of this weighted-average calculation:

- (i) The weight assigned to 1,250 percent equals $\frac{K_A-A}{D-A}$; and
- (ii) The weight assigned to 1,250 percent times K_{SSFA} equals $\frac{D-K_A}{D-A}$. The risk weight will be set equal to:

Risk Weight =

$$\left[\left(\frac{K_A - A}{D - A}\right) \cdot 1,250 \; percent\right] + \left[\left(\frac{D - K_A}{D - A}\right) \cdot 1,250 \; percent \; \cdot K_{SSFA}\right]$$

(d) SSFA equation. (1) The [BANK] must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$a = -\frac{1}{p \cdot K_A}$$

$$u = D - K_A$$

$$l = \max(A - K_4, 0)$$

e = 2.71828, the base of the natural logarithms.

(2) Then the [BANK] must calculate K_{SSFA} according to the following equation:

$$K_{SSFA} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a \left(u - l\right)}$$

(3) The risk weight for the exposure (expressed as a percent) is equal to $K_{SSFA} \times 1,250$.

§ 3.145 Recognition of credit risk mitigants for securitization exposures.

(a) General. An originating national bank or Federal savings association that has obtained a credit risk mitigant to hedge its securitization exposure to a synthetic or traditional securitization that satisfies the operational criteria in §3.141 may recognize the credit risk mitigant, but only as provided in this section. An investing national bank or Federal savings association that has obtained a credit risk mitigant to hedge a securitization ex-

posure may recognize the credit risk mitigant, but only as provided in this section.

(b) Collateral. (1) Rules of recognition. A national bank or Federal savings association may recognize financial collateral in determining the national bank's or Federal savings association's risk-weighted asset amount for a securitization exposure (other than a repo-style transaction, an eligible margin loan, or an OTC derivative contract for which the national bank or Federal savings association has reflected collateral in its determination of exposure

amount under §3.132) as follows. The national bank's or Federal savings association's risk-weighted asset amount for the collateralized securitization exposure is equal to the risk-weighted asset amount for the securitization exposure as calculated under the SSFA in §3.144 or under the SFA in §3.143 multiplied by the ratio of adjusted exposure amount (SE*) to original exposure amount (SE),

Where:

- (i) $SE^* = max \{0, [SE-C \times (1-H_s-H_{fx})]\};$
- (ii) SE = the amount of the securitization exposure calculated under §3.142(e);
- (iii) C = the current fair value of the collateral:
- (iv) H_s = the haircut appropriate to the collateral type; and
- (v) H_{fx} = the haircut appropriate for any currency mismatch between the collateral and the exposure.
- (2) <u>Mixed collateral</u>. Where the collateral is a basket of different asset types or a basket of assets denominated in different currencies, the haircut on the basket will be $H = \sum_i a_i H_i$,

where a_i is the current fair value of the asset in the basket divided by the current fair value of all assets in the basket and H_i is the haircut applicable to that asset.

- (3) Standard supervisory haircuts. Unless a national bank or Federal savings association qualifies for use of and uses own-estimates haircuts in paragraph (b)(4) of this section:
- (i) A national bank or Federal savings association must use the collateral type haircuts (H_s) in Table 1 to §3.132 of this subpart;
- (ii) A national bank or Federal savings association must use a currency mismatch haircut $(H_{\rm fx})$ of 8 percent if the exposure and the collateral are denominated in different currencies;
- (iii) A national bank or Federal savings association must multiply the supervisory haircuts obtained in paragraphs (b)(3)(i) and (ii) of this section by the square root of 6.5 (which equals 2.549510); and
- (iv) A national bank or Federal savings association must adjust the supervisory haircuts upward on the basis of a holding period longer than 65 business days where and as appropriate to take into account the illiquidity of the collateral.
- (4) Own estimates for haircuts. With the prior written approval of the OCC, a national bank or Federal savings association may calculate haircuts using its own internal estimates of market price volatility and foreign exchange

- volatility, subject to $\S3.132(b)(2)(iii)$. The minimum holding period (T_M) for securitization exposures is 65 business days.
- (c) Guarantees and credit derivatives—
 (1) Limitations on recognition. A national bank or Federal savings association may only recognize an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the national bank's or Federal savings association's risk-weighted asset amount for a securitization exposure.
- (2) ECL for securitization exposures. When a national bank or Federal savings association recognizes an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the national bank's or Federal savings association's risk-weighted asset amount for a securitization exposure, the national bank or Federal savings association must also:
- (i) Calculate ECL for the protected portion of the exposure using the same risk parameters that it uses for calculating the risk-weighted asset amount of the exposure as described in paragraph (c)(3) of this section; and
- (ii) Add the exposure's ECL to the national bank's or Federal savings association's total ECL.

§§ 3.146-3.150

- (3) Rules of recognition. A national bank or Federal savings association may recognize an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the national bank's or Federal savings association's risk-weighted asset amount for the securitization exposure as follows:
- (i) Full coverage. If the protection amount of the eligible guarantee or eligible credit derivative equals or exceeds the amount of the securitization exposure, the national bank or Federal savings association may set the riskweighted asset amount for securitization exposure equal to the risk-weighted asset amount for a direct exposure to the eligible guarantor (as determined in the wholesale risk weight function described in §3.131), using the national bank's or Federal savings association's PD for the guarantor, the national bank's or Federal savings association's LGD for the guarantee or credit derivative, and an EAD egual to the amount of securitization exposure (as determined in $\S 3.142(e)$).
- (ii) Partial coverage. If the protection amount of the eligible guarantee or eligible credit derivative is less than the amount of the securitization exposure, the national bank or Federal savings association may set the risk-weighted asset amount for the securitization exposure equal to the sum of:
- (A) Covered portion. The risk-weighted asset amount for a direct exposure to the eligible guarantor (as determined in the wholesale risk weight function described in §3.131), using the national bank's or Federal savings association's PD for the guarantor, the national bank's or Federal savings association's LGD for the guarantee or credit derivative, and an EAD equal to the protection amount of the credit risk mitigant; and
- (B) Uncovered portion. (1) 1.0 minus the ratio of the protection amount of the eligible guarantee or eligible credit derivative to the amount of the securitization exposure); multiplied by
- (2) The risk-weighted asset amount for the securitization exposure without the credit risk mitigant (as determined in §§ 3.142 through 146).

(4) Mismatches. The national bank or Federal savings association must make applicable adjustments to the protection amount as required in §3.134(d), any and (e). (f) for hedged securitization exposure and any more senior securitization exposure that benefits from the hedge. In the context of a synthetic securitization, when an eligible guarantee or eligible credit derivative covers multiple hedged exposures that have different residual maturities, the national bank or Federal savings association must use the longest residual maturity of any of the hedged exposures as the residual maturity of all the hedged exposures.

§§ 3.146-3.150 [Reserved]

RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

§ 3.151 Introduction and exposure measurement.

- (a) General. (1) To calculate its risk-weighted asset amounts for equity exposures that are not equity exposures to investment funds, a national bank or Federal savings association may apply either the Simple Risk Weight Approach (SRWA) in §3.152 or, if it qualifies to do so, the Internal Models Approach (IMA) in §3.153. A national bank or Federal savings association must use the look-through approaches provided in §3.154 to calculate its risk-weighted asset amounts for equity exposures to investment funds.
- (2) A national bank or Federal savings association must treat an investment in a separate account (as defined in §3.2), as if it were an equity exposure to an investment fund as provided in §3.154.
- (3) Stable value protection. (i) Stable value protection means a contract where the provider of the contract is obligated to pay:
- (A) The policy owner of a separate account an amount equal to the short-fall between the fair value and cost basis of the separate account when the policy owner of the separate account surrenders the policy, or
- (B) The beneficiary of the contract an amount equal to the shortfall between the fair value and book value of a specified portfolio of assets.

- (ii) A national bank or Federal savings association that purchases stable value protection on its investment in a separate account must treat the portion of the carrying value of its investment in the separate account attributable to the stable value protection as an exposure to the provider of the protection and the remaining portion of the carrying value of its separate account as an equity exposure to an investment fund.
- (iii) A national bank or Federal savings association that provides stable value protection must treat the exposure as an equity derivative with an adjusted carrying value determined as the sum of §3.151(b)(1) and (2).
- (b) Adjusted carrying value. For purposes of this subpart, the adjusted carrying value of an equity exposure is:
- (1) For the on-balance sheet component of an equity exposure, the national bank's or Federal savings association's carrying value of the exposure;
- (2) For the off-balance sheet component of an equity exposure, the effective notional principal amount of the exposure, the size of which is equivalent to a hypothetical on-balance sheet position in the underlying equity instrument that would evidence the same change in fair value (measured in dollars) for a given small change in the price of the underlying equity instrument, minus the adjusted carrying value of the on-balance sheet component of the exposure as calculated in paragraph (b)(1) of this section.
- (3) For unfunded equity commitments that are unconditional, the effective notional principal amount is the notional amount of the commitment. For unfunded equity commitments that are conditional, the effective notional principal amount is the national bank's or Federal savings association's best estimate of the amount that would be funded under economic downturn conditions.

§3.152 Simple risk weight approach (SRWA).

(a) General. Under the SRWA, a national bank's or Federal savings association's aggregate risk-weighted asset amount for its equity exposures is equal to the sum of the risk-weighted

- asset amounts for each of the national bank's or Federal savings association's individual equity exposures (other than equity exposures to an investment fund) as determined in this section and the risk-weighted asset amounts for each of the national bank's or Federal savings association's individual equity exposures to an investment fund as determined in §3.154.
- (b) SRWA computation for individual equity exposures. A national bank or Federal savings association must determine the risk-weighted asset amount for an individual equity exposure (other than an equity exposure to an investment fund) by multiplying the adjusted carrying value of the equity exposure or the effective portion and ineffective portion of a hedge pair (as defined in paragraph (c) of this section) by the lowest applicable risk weight in this section.
- (1) Zero percent risk weight equity exposures. An equity exposure to an entity whose credit exposures are exempt from the 0.03 percent PD floor in §3.131(d)(2) is assigned a zero percent risk weight.
- (2) 20 percent risk weight equity exposures. An equity exposure to a Federal Home Loan Bank or the Federal Agricultural Mortgage Corporation (Farmer Mac) is assigned a 20 percent risk weight.
- (3) 100 percent risk weight equity exposures. The following equity exposures are assigned a 100 percent risk weight:
- (i) Community development equity exposures. An equity exposure that qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act, excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a consolidated small business investment company described in section 302 of the Small Business Investment Act.
- (ii) Effective portion of hedge pairs. The effective portion of a hedge pair.
- (iii) Non-significant equity exposures. Equity exposures, excluding significant investments in the capital of an unconsolidated institution in the form of common stock and exposures to an investment firm that would meet the definition of a traditional securitization were it not for the OCC's application of

paragraph (8) of that definition in §3.2 and has greater than immaterial leverage, to the extent that the aggregate adjusted carrying value of the exposures does not exceed 10 percent of the national bank's or Federal savings association's total capital.

(A) To compute the aggregate adjusted carrying value of a national bank's or Federal savings association's equity exposures for purposes of this section, the national bank or Federal savings association may exclude equity exposures described in paragraphs (b)(1), (b)(2), (b)(3)(i), and (b)(3)(ii) of this section, the equity exposure in a hedge pair with the smaller adjusted carrying value, and a proportion of each equity exposure to an investment fund equal to the proportion of the assets of the investment fund that are not equity exposures or that meet the criterion of paragraph (b)(3)(i) of this section. If a national bank or Federal savings association does not know the actual holdings of the investment fund, the national bank or Federal savings association may calculate the proportion of the assets of the fund that are not equity exposures based on the terms of the prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. If the sum of the investment limits for all exposure classes within the fund exceeds 100 percent, the national bank or Federal savings association must assume for purposes of this section that the investment fund invests to the maximum extent possible in equity exposures.

(B) When determining which of a national bank's or Federal savings association's equity exposures qualifies for a 100 percent risk weight under this section, a national bank or Federal savings association first must include equity exposures to unconsolidated small business investment companies or held through consolidated small business investment companies described in section 302 of the Small Business Investment Act, then must include publicly traded equity exposures (including those held indirectly through investment funds), and then must include non-publicly traded equity exposures (including those held indirectly through investment funds).

- (4) 250 percent risk weight equity exposures. Significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not deducted from capital pursuant to §3.22(b)(4) are assigned a 250 percent risk weight.
- (5) 300 percent risk weight equity exposures. A publicly traded equity exposure (other than an equity exposure described in paragraph (b)(6) of this section and including the ineffective portion of a hedge pair) is assigned a 300 percent risk weight.
- (6) 400 percent risk weight equity exposures. An equity exposure (other than an equity exposure described in paragraph (b)(6) of this section) that is not publicly traded is assigned a 400 percent risk weight.
- (7) 600 percent risk weight equity exposures. An equity exposure to an investment firm that:
- (i) Would meet the definition of a traditional securitization were it not for the OCC's application of paragraph (8) of that definition in §3.2; and
- (ii) Has greater than immaterial leverage is assigned a 600 percent risk weight.
- (c) Hedge transactions—(1) Hedge pair. A hedge pair is two equity exposures that form an effective hedge so long as each equity exposure is publicly traded or has a return that is primarily based on a publicly traded equity exposure.
- (2) Effective hedge. Two equity exposures form an effective hedge if the exposures either have the same remaining maturity or each has a remaining maturity of at least three months; the hedge relationship is formally documented in a prospective manner (that is, before the national bank or Federal savings association acquires at least one of the equity exposures); the documentation specifies the measure of effectiveness (E) the national bank or Federal savings association will use for the hedge relationship throughout the life of the transaction; and the hedge relationship has an E greater than or equal to 0.8. A national bank or Federal savings association must measure E at least quarterly and must use one of three alternative measures of E:
- (i) Under the dollar-offset method of measuring effectiveness, the national bank or Federal savings association

must determine the ratio of value change (RVC). The RVC is the ratio of the cumulative sum of the periodic changes in value of one equity exposure to the cumulative sum of the periodic changes in the value of the other equity exposure. If RVC is positive, the hedge is not effective and E equals

zero. If RVC is negative and greater than or equal to -1 (that is, between zero and -1), then E equals the absolute value of RVC. If RVC is negative and less than -1, then E equals 2 plus RVC.

(ii) Under the variability-reduction method of measuring effectiveness:

$$E = 1 - \frac{\sum_{t=1}^{T} (X_{t} - X_{t-1})^{2}}{\sum_{t=1}^{T} (A_{t} - A_{t-1})^{2}}, \text{ where}$$

- (A) $X_{t} = A_{t} B_{t};$
- (B) A_{+} = the value at time t of one exposure in a hedge pair; and
- (C) B_{i} = the value at time t of the other exposure in a hedge pair.
- (iii) Under the regression method of measuring effectiveness, E equals the coefficient of determination of a regression in which the change in value of one exposure in a hedge pair is the dependent variable and the change in value of the other exposure in a hedge pair is the independent variable. However, if the estimated regression coefficient is positive, then the value of E is zero.
- (3) The effective portion of a hedge pair is E multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.
- (4) The ineffective portion of a hedge pair is (1–E) multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

§ 3.153 Internal models approach (IMA).

(a) General. A national bank or Federal savings association may calculate its risk-weighted asset amount for equity exposures using the IMA by modeling publicly traded and non-publicly traded equity exposures (in accordance with paragraph (c) of this section) or

by modeling only publicly traded equity exposures (in accordance with paragraphs (c) and (d) of this section).

- (b) Qualifying criteria. To qualify to use the IMA to calculate risk-weighted assets for equity exposures, a national bank or Federal savings association must receive prior written approval from the OCC. To receive such approval, the national bank or Federal savings association must demonstrate to the OCC's satisfaction that the national bank or Federal savings association meets the following criteria:
- (1) The national bank or Federal savings association must have one or more models that:
- (i) Assess the potential decline in value of its modeled equity exposures;
- (ii) Are commensurate with the size, complexity, and composition of the national bank's or Federal savings association's modeled equity exposures; and
- (iii) Adequately capture both general market risk and idiosyncratic risk.
- (2) The national bank's or Federal savings association's model must produce an estimate of potential losses

for its modeled equity exposures that is no less than the estimate of potential losses produced by a VaR methodology employing a 99th percentile one-tailed confidence interval of the distribution of quarterly returns for a benchmark portfolio of equity exposures comparable to the national bank's or Federal savings association's modeled equity exposures using a long-term sample period.

- (3) The number of risk factors and exposures in the sample and the data period used for quantification in the national bank's or Federal savings association's model and benchmarking exercise must be sufficient to provide confidence in the accuracy and robustness of the national bank's or Federal savings association's estimates.
- (4) The national bank's or Federal savings association's model benchmarking process must incorporate data that are relevant in representing the risk profile of the national bank's or Federal savings association's modeled equity exposures, and must include data from at least one equity market cycle containing adverse market movements relevant to the risk profile of the national bank's or Federal savings association's modeled equity exposures. In addition, the national bank's or Federal savings association's benchmarking exercise must be based on daily market prices for the benchmark portfolio. If the national bank's or Federal savings association's model uses a scenario methodology, the national bank or Federal savings association must demonstrate that the model produces a conservative estimate of potential losses on the national bank's or Federal savings association's modeled equity exposures over a relevant long-term market cycle. If the national bank or Federal savings association employs risk factor models, the national bank or Federal savings association must demonstrate through empirical analysis the appropriateness of the risk factors used.
- (5) The national bank or Federal savings association must be able to demonstrate, using theoretical arguments and empirical evidence, that any proxies used in the modeling process are comparable to the national bank's or

Federal savings association's modeled equity exposures and that the national bank or Federal savings association has made appropriate adjustments for differences. The national bank or Federal savings association must derive any proxies for its modeled equity exposures and benchmark portfolio using historical market data that are relevant to the national bank's or Federal savings association's modeled equity exposures and benchmark portfolio (or, where not, must use appropriately adjusted data), and such proxies must be robust estimates of the risk of the national bank's or Federal savings association's modeled equity exposures.

- (c) Risk-weighted assets calculation for a national bank or Federal savings association using the IMA for publicly traded and non-publicly traded equity exposures. If a national bank or Federal savings association models publicly traded and non-publicly traded equity exposures, the national bank's or Federal savings association's aggregate risk-weighted asset amount for its equity exposures is equal to the sum of:
- (1) The risk-weighted asset amount of each equity exposure that qualifies for a 0 percent, 20 percent, or 100 percent risk weight under §3.152(b)(1) through (b)(3)(i) (as determined under §3.152) and each equity exposure to an investment fund (as determined under §3.154); and
 - (2) The greater of:
- (i) The estimate of potential losses on the national bank's or Federal savings association's equity exposures (other than equity exposures referenced in paragraph (c)(1) of this section) generated by the national bank's or Federal savings association's internal equity exposure model multiplied by 12.5; or
 - (ii) The sum of:
- (A) 200 percent multiplied by the aggregate adjusted carrying value of the national bank's or Federal savings association's publicly traded equity exposures that do not belong to a hedge pair, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under §3.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund;

- (B) 200 percent multiplied by the aggregate ineffective portion of all hedge pairs; and
- (C) 300 percent multiplied by the aggregate adjusted carrying value of the national bank's or Federal savings association's equity exposures that are not publicly traded, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under §3.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund.
- (d) Risk-weighted assets calculation for a national bank or Federal savings association using the IMA only for publicly traded equity exposures. If a national bank or Federal savings association models only publicly traded equity exposures, the national bank's or Federal savings association's aggregate risk-weighted asset amount for its equity exposures is equal to the sum of:
- (1) The risk-weighted asset amount of each equity exposure that qualifies for a 0 percent, 20 percent, or 100 percent risk weight under §§3.152(b)(1) through (b)(3)(i) (as determined under §3.152), each equity exposure that qualifies for a 400 percent risk weight under §3.152(b)(5) or a 600 percent risk weight under §3.152(b)(6) (as determined under §3.152), and each equity exposure to an investment fund (as determined under §3.154); and
 - (2) The greater of:
- (i) The estimate of potential losses on the national bank's or Federal savings association's equity exposures (other than equity exposures referenced in paragraph (d)(1) of this section) generated by the national bank's or Federal savings association's internal equity exposure model multiplied by 12.5; or
 - (ii) The sum of:
- (A) 200 percent multiplied by the aggregate adjusted carrying value of the national bank's or Federal savings association's publicly traded equity exposures that do not belong to a hedge pair, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under §3.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund; and
- (B) 200 percent multiplied by the aggregate ineffective portion of all hedge pairs.

§ 3.154 Equity exposures to investment funds.

- (a) Available approaches. (1) Unless the exposure meets the requirements for a community development equity exposure in §3.152(b)(3)(i), a national bank or Federal savings association must determine the risk-weighted asset amount of an equity exposure to an investment fund under the full look-through approach in paragraph (b) of this section, the simple modified look-through approach in paragraph (c) of this section, or the alternative modified look-through approach in paragraph (d) of this section.
- (2) The risk-weighted asset amount of an equity exposure to an investment fund that meets the requirements for a community development equity exposure in §3.152(b)(3)(i) is its adjusted carrying value.
- (3) If an equity exposure to an investment fund is part of a hedge pair and the national bank or Federal savings association does not use the full look-through approach, the national bank or Federal savings association may use the ineffective portion of the hedge pair as determined under §3.152(c) as the adjusted carrying value for the equity exposure to the investment fund. The risk-weighted asset amount of the effective portion of the hedge pair is equal to its adjusted carrying value.
- (b) Full look-through approach. A national bank or Federal savings association that is able to calculate a risk-weighted asset amount for its proportional ownership share of each exposure held by the investment fund (as calculated under this subpart E of this part as if the proportional ownership share of each exposure were held directly by the national bank or Federal savings association) may either:
- (1) Set the risk-weighted asset amount of the national bank's or Federal savings association's exposure to the fund equal to the product of:
- (i) The aggregate risk-weighted asset amounts of the exposures held by the fund as if they were held directly by the national bank or Federal savings association; and
- (ii) The national bank's or Federal savings association's proportional ownership share of the fund; or

- (2) Include the national bank's or Federal savings association's proportional ownership share of each exposure held by the fund in the national bank's or Federal savings association's IMA.
- (c) Simple modified look-through approach. Under this approach, the riskweighted asset amount for a national bank's or Federal savings association's equity exposure to an investment fund equals the adjusted carrying value of the equity exposure multiplied by the highest risk weight assigned according to subpart D of this part that applies to any exposure the fund is permitted to hold under its prospectus, partnership agreement, or similar contract that defines the fund's permissible investments (excluding derivative contracts that are used for hedging rather than speculative purposes and that do not constitute a material portion of the fund's exposures).
- (d) Alternative modified look-through approach. Under this approach, a national bank or Federal savings association may assign the adjusted carrying value of an equity exposure to an investment fund on a pro rata basis to different risk weight categories assigned according to subpart D of this part based on the investment limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. The risk-weighted asset amount for the national bank's or Federal savings association's equity exposure to the investment fund equals the sum of each portion of the adjusted carrying value assigned to an exposure class multiplied by the applicable risk weight. If the sum of the investment limits for all exposure types within the fund exceeds 100 percent, the national bank or Federal savings association must assume that the fund invests to the maximum extent permitted under its investment limits in the exposure type with the highest risk weight under subpart D of this part, and continues to make investments in order of the exposure type with the next highest risk weight under subpart D of this part until the maximum total investment level is reached. If more than one exposure type applies to an exposure, the national bank or Federal savings

association must use the highest applicable risk weight. A national bank or Federal savings association may exclude derivative contracts held by the fund that are used for hedging rather than for speculative purposes and do not constitute a material portion of the fund's exposures.

§ 3.155 Equity derivative contracts.

- (a) Under the IMA, in addition to holding risk-based capital against an equity derivative contract under this part, a national bank or Federal savings association must hold risk-based capital against the counterparty credit risk in the equity derivative contract by also treating the equity derivative contract as a wholesale exposure and computing a supplemental risk-weighted asset amount for the contract under \$3.132.
- (b) Under the SRWA, a national bank or Federal savings association may choose not to hold risk-based capital against the counterparty credit risk of equity derivative contracts, as long as it does so for all such contracts. Where the equity derivative contracts are subject to a qualified master netting agreement, a national bank or Federal savings association using the SRWA must either include all or exclude all of the contracts from any measure used to determine counterparty credit risk exposure.

§§ 3.166—3.160 [Reserved]

RISK-WEIGHTED ASSETS FOR OPERATIONAL RISK

§ 3.161 Qualification requirements for incorporation of operational risk mitigants.

- (a) Qualification to use operational risk mitigants. A national bank or Federal savings association may adjust its estimate of operational risk exposure to reflect qualifying operational risk mitigants if:
- (1) The national bank's or Federal savings association's operational risk quantification system is able to generate an estimate of the national bank's or Federal savings association's operational risk exposure (which does not incorporate qualifying operational risk mitigants) and an estimate of the

national bank's or Federal savings association's operational risk exposure adjusted to incorporate qualifying operational risk mitigants; and

- (2) The national bank's or Federal savings association's methodology for incorporating the effects of insurance, if the national bank or Federal savings association uses insurance as an operational risk mitigant, captures through appropriate discounts to the amount of risk mitigation:
- (i) The residual term of the policy, where less than one year;
- (ii) The cancellation terms of the policy, where less than one year;
- (iii) The policy's timeliness of payment;
- (iv) The uncertainty of payment by the provider of the policy; and
- (v) Mismatches in coverage between the policy and the hedged operational loss event.
- (b) Qualifying operational risk mitigants. Qualifying operational risk mitigants are:
 - (1) Insurance that:
- (i) Is provided by an unaffiliated company that the national bank or Federal savings association deems to have strong capacity to meet its claims payment obligations and the obligor rating category to which the national bank or Federal savings association assigns the company is assigned a PD equal to or less than 10 basis points;
- (ii) Has an initial term of at least one year and a residual term of more than 90 days:
- (iii) Has a minimum notice period for cancellation by the provider of 90 days;
- (iv) Has no exclusions or limitations based upon regulatory action or for the receiver or liquidator of a failed depository institution; and
- (v) Is explicitly mapped to a potential operational loss event;
- (2) Operational risk mitigants other than insurance for which the OCC has given prior written approval. In evaluating an operational risk mitigant other than insurance, the OCC will consider whether the operational risk mitigant covers potential operational losses in a manner equivalent to holding total capital.

§ 3.162 Mechanics of risk-weighted asset calculation.

- (a) If a national bank or Federal savings association does not qualify to use or does not have qualifying operational risk mitigants, the national bank's or Federal savings association's dollar risk-based capital requirement for operational risk is its operational risk exposure minus eligible operational risk offsets (if any).
- (b) If a national bank or Federal savings association qualifies to use operational risk mitigants and has qualifying operational risk mitigants, the national bank's or Federal savings association's dollar risk-based capital requirement for operational risk is the greater of:
- (1) The national bank's or Federal savings association's operational risk exposure adjusted for qualifying operational risk mitigants minus eligible operational risk offsets (if any); or
- (2) 0.8 multiplied by the difference between:
- (i) The national bank's or Federal savings association's operational risk exposure; and
- (ii) Eligible operational risk offsets (if any).
- (c) The national bank's or Federal savings association's risk-weighted asset amount for operational risk equals the national bank's or Federal savings association's dollar risk-based capital requirement for operational risk determined under sections 162(a) or (b) multiplied by 12.5.

§§ 3.163-3.170 [Reserved]

DISCLOSURES

§ 3.171 Purpose and scope.

§§ 3.171 through 3.173 establish public disclosure requirements related to the capital requirements of a national bank or Federal savings association that is an advanced approaches national bank or Federal savings association.

§ 3.172 Disclosure requirements.

(a) A national bank or Federal savings association that is an advanced approaches national bank or Federal savings association that has completed the parallel run process and that has

received notification from the OCC pursuant to section 121(d) of subpart E of this part must publicly disclose each quarter its total and tier 1 risk-based capital ratios and their components as calculated under this subpart (that is, common equity tier 1 capital, additional tier 1 capital, tier 2 capital, total qualifying capital, and total risk-weighted assets).

(b) A national bank or Federal savings association that is an advanced approaches national bank or Federal savings association that has completed the parallel run process and that has received notification from the OCC pursuant to section 121(d) of subpart E of this part must comply with paragraph (c) of this section unless it is a consolidated subsidiary of a bank holding company, savings and loan holding company, or depository institution that is subject to these disclosure requirements or a subsidiary of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction.

(c)(1) A national bank or Federal savings association described in paragraph (b) of this section must provide timely public disclosures each calendar quarter of the information in the applicable tables in §3.173. If a significant change occurs, such that the most recent reported amounts are no longer reflective of the national bank's or Federal savings association's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be disclosed as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter (for example, a general summary of the national bank's or Federal savings association's risk management objectives and policies, reporting system, and definitions) may be disclosed annually after the end of the fourth calendar quarter, provided that any significant changes to these are disclosed in the interim. Management may provide all of the disclosures required by this subpart in one place on the national bank's or Federal savings association's public Web site or may provide the disclosures in more than one public financial report or other regulatory reports,

provided that the national bank or Federal savings association publicly provides a summary table specifically indicating the location(s) of all such disclosures.

(2) A national bank or Federal savings association described in paragraph (b) of this section must have a formal disclosure policy approved by the board of directors that addresses its approach for determining the disclosures it makes. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this subpart, and must ensure that appropriate review of the disclosures takes place. One or more senior officers of the national bank or Federal savings association must attest that the disclosures meet the requirements of this subpart.

(3) If a national bank or Federal savings association described in paragraph (b) of this section believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public information that is either proprietary or confidential in nature, the national bank or Federal savings association is not required to disclose those specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

§ 3.173 Disclosures by certain advanced approaches national banks or Federal savings associations.

(a) Except as provided in §3.172(b), a national bank or Federal savings association described in §3.172(b) must make the disclosures described in Tables 1 through 12 to §3.173. The national bank or Federal savings association must make these disclosures publicly available for each of the last three years (that is, twelve quarters) or such shorter period beginning on January 1, 2014.

TABLE 1 TO § 3.173—SCOPE OF APPLICATION

	- 0 -	
Qualitative disclosures	(a)	The name of the top corporate entity in the group to which subpart E of this part applies.
	(b)	A brief description of the differences in the basis for consolidating entities¹ for accounting and regulatory purposes, with a description of those entities:
		(1) That are fully consolidated;
		(2) That are deconsolidated and deducted from total capital;
		(3) For which the total capital requirement is deducted; and
		(4) That are neither consolidated nor deducted (for example, where the investment in the entity is assigned a risk weight in accordance with this subpart).
	(c)	Any restrictions, or other major impediments, on transfer of funds or total capital within the group.
Quantitative disclosures	(d)	The aggregate amount of surplus capital of insurance subsidiaries included in the total capital of the consolidated group.
	(e)	The aggregate amount by which actual total capital is less than the minimum total capital requirement in all subsidiaries, with total capital requirements and the name(s) of the subsidiaries with such deficiencies.

¹Such entities include securities, insurance and other financial subsidiaries, commercial subsidiaries (where permitted), and significant minority equity investments in insurance, financial and commercial entities.

TABLE 2 TO § 3.173—CAPITAL STRUCTURE

Qualitative disclosures	(a)	Summary information on the terms and conditions of the main fea- tures of all regulatory capital instruments.
Quantitative disclosures	(b)	The amount of common equity tier 1 capital, with separate disclosure of: (1) Common stock and related surplus; (2) Retained earnings; (3) Common equity minority interest;
		(4) AOCI (net of tax) and other reserves; and (5) Regulatory adjustments and deductions made to common equity tier 1 capital.
	(c)	The amount of tier 1 capital, with separate disclosure of: (1) Additional tier 1 capital elements, including additional tier 1 capital instruments and tier 1 minority interest not included in common equity tier 1 capital; and
	(d)	(2) Regulatory adjustments and deductions made to tier 1 capital. The amount of total capital, with separate disclosure of: (1) Tier 2 capital elements, including tier 2 capital instruments and total capital minority interest not included in tier 1 capital; and (2) Regulatory adjustments and deductions made to total capital.

TABLE 3 TO § 3.173—CAPITAL ADEQUACY

TABLE 3 TO § 3.173—CAPITAL ADEQUACY		
Qualitative disclosures	(a)	A summary discussion of the national bank's or Federal savings as- sociation's approach to assessing the adequacy of its capital to support current and future activities.
Quantitative disclosures	(b)	Risk-weighted assets for credit risk from: (1) Wholesale exposures; (2) Residential mortgage exposures; (3) Qualifying revolving exposures; (4) Other retail exposures; (5) Securitization exposures; (6) Equity exposures: (7) Equity exposures subject to the simple risk weight approach; and
	(c)	(8) Equity exposures subject to the internal models approach. Standardized market risk-weighted assets and advanced market risk-weighted assets as calculated under subpart F of this part: (1) Standardized approach for specific risk; and (2) Internal models approach for specific risk.
	(d) (e)	Risk-weighted assets for operational risk. Common equity tier 1, tier 1 and total risk-based capital ratios: (1) For the top consolidated group; and (2) For each depository institution subsidiary. Total risk-weighted assets.

TABLE 4 TO § 3.173—CAPITAL CONSERVATION AND COUNTERCYCLICAL CAPITAL BUFFERS

Qualitative disclosures	(a)	The national bank or Federal savings association must publicly dis- close the geographic breakdown of its private sector credit expo- sures used in the calculation of the countercyclical capital buffer.
Quantitative disclosures	(b)	At least quarterly, the national bank or Federal savings association must calculate and publicly disclose the capital conservation buffer and the countercyclical capital buffer as described under § 3.11 of subpart B.
	(c)	At least quarterly, the national bank or Federal savings association must calculate and publicly disclose the buffer retained income of the national bank or Federal savings association, as described under § 3.11 of subpart B.
	(d)	At least quarterly, the national bank or Federal savings association must calculate and publicly disclose any limitations it has on distributions and discretionary bonus payments resulting from the capital conservation buffer and the countercyclical capital buffer framework described under §3.11 of subpart B, including the maximum payout amount for the quarter.

- (b) General qualitative disclosure requirement. For each separate risk area described in Tables 5 through 12 to §3.173, the national bank or Federal savings association must describe its risk management objectives and policies, including:
 - (1) Strategies and processes;
- (2) The structure and organization of the relevant risk management function;
- (3) The scope and nature of risk reporting and/or measurement systems; and
- (4) Policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

TABLE 5 1 TO § 3.173—CREDIT RISK: GENERAL DISCLOSURES

	I	İ
Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to credit risk (excluding counterparty credit risk disclosed in accordance with Table 7 to § 3.173), including: (1) Policy for determining past due or delinquency status; (2) Policy for placing loans on nonaccrual; (3) Policy for returning loans to accrual status; (4) Definition of and policy for identifying impaired loans (for financial accounting purposes). (5) Description of the methodology that the entity uses to estimate its allowance for loan and lease losses, including statistical methods used where applicable; (6) Policy for charging-off uncollectible amounts; and
		(7) Discussion of the national bank's or Federal savings associa-
0		tion's credit risk management policy
Quantitative disclosures	(b)	Total credit risk exposures and average credit risk exposures, after accounting offsets in accordance with GAAP. ² without taking into account the effects of credit risk mitigation techniques (for example, collateral and netting not permitted under GAAP), over the period categorized by major types of credit exposure. For example, national banks or Federal savings associations could use categories similar to that used for financial statement purposes. Such categories might include, for instance: (1) Loans, off-balance sheet commitments, and other non-derivative off-balance sheet exposures; (2) Debt securities; and (3) OTC derivatives.
	(c)	Geographic ³ distribution of exposures, categorized in significant
		areas by major types of credit exposure.
	(d)	Industry or counterparty type distribution of exposures, categorized by major types of credit exposure.
	(e)	By major industry or counterparty type:
		(1) Amount of impaired loans for which there was a related allow- ance under GAAP;
		(2) Amount of impaired loans for which there was no related allow- ance under GAAP;
		(3) Amount of loans past due 90 days and on nonaccrual;
		(4) Amount of loans past due 90 days and still accruing; 4

TABLE 5 1 TO § 3.173—CREDIT RISK: GENERAL DISCLOSURES—Continued

	(5) The balance in the allowance for loan and lease losses at the end of each period, disaggregated on the basis of the entity's im- pairment method. To disaggregate the information required on the basis of impairment methodology, an entity shall separately dis- close the amounts based on the requirements in GAAP; and (6) Charge-offs during the period.
(f)	Amount of impaired loans and, if available, the amount of past due loans categorized by significant geographic areas including, if practical, the amounts of allowances related to each geographical area,5 further categorized as required by GAAP.
(g)	Reconciliation of changes in ALLL. ⁶
(h)	Remaining contractual maturity breakdown (for example, one year or less) of the whole portfolio, categorized by credit exposure.

TABLE 6 TO § 3.173—CREDIT RISK: DISCLOSURES FOR PORTFOLIOS SUBJECT TO IRB RISK-BASED CAPITAL FORMULAS

Qualitative disclosures	(a)	Explanation and review of the:	
		(1) Structure of internal rating systems and relation between internal and external ratings;	
		(2) Use of risk parameter estimates other than for regulatory capital purposes;	
		(3) Process for managing and recognizing credit risk mitigation (see Table 8 to § 3.173); and	
		(4) Control mechanisms for the rating system, including discussion of independence, accountability, and rating systems review.	
	(b)	Description of the internal ratings process, provided separately for	
		the following: (1) Wholesale category;	
		(2) Retail subcategories;	
		(i) Residential mortgage exposures;	
		(ii) Qualifying revolving exposures; and	
		(iii) Other retail exposures.	
		For each category and subcategory above the description should in-	
		clude:	
		(A) The types of exposure included in the category/subcategories; and	
		(B) The definitions, methods and data for estimation and validation of PD, LGD, and EAD, including assumptions employed in the derivation of these variables.¹	
Quantitative disclosures: risk assessment.	(c)	(1) For wholesale exposures, present the following information across a sufficient number of PD grades (including default) to allow for a meaningful differentiation of credit risk:2	
		(i) Total EAD; ³	
		(ii) Exposure-weighted average LGD (percentage);	
		(iii) Exposure-weighted average risk weight; and	
		 (iv) Amount of undrawn commitments and exposure-weighted aver- age EAD including average drawdowns prior to default for whole- sale exposures. 	
		(2) For each retail subcategory, present the disclosures outlined above across a sufficient number of segments to allow for a	
		meaningful differentiation of credit risk.	
Quantitative disclosures: historical results.	(d)	Actual losses in the preceding period for each category and sub- category and how this differs from past experience. A discussion of the factors that impacted the loss experience in the preceding period—for example, has the national bank or Federal savings as-	
		sociation experienced higher than average default rates, loss rates or EADs.	

¹ Table 5 to §3.173 does not cover equity exposures, which should be reported in Table 9.

² See, for example, ASC Topic 815–10 and 210–20 as they may be amended from time to time.

³ Geographical areas may comprise individual countries, groups of countries, or regions within countries. A national bank or Federal savings association might choose to define the geographical areas based on the way the company's portfolio is geographical areas. The criteria used to allocate the loans to geographical areas must be specified.

⁴ A national bank or Federal savings association is encouraged also to provide an analysis of the aging of past-due loans.

⁵ The portion of the general allowance that is not allocated to a geographical area should be disclosed separately.

⁶ The reconciliation should include the following: A description of the allowance; the opening balance of the allowance; chargeoffs taken against the allowance during the period; amounts provided (or reversed) for estimated probable loan losses during the period; any other adjustments (for example, exchange rate differences, business combinations, acquisitions and disposals of subsidiaries), including transfers between allowances; and the closing balance of the allowance. Charge-offs and recoveries that have been recorded directly to the income statement should be disclosed separately.

TABLE 6 TO § 3.173—CREDIT RISK: DISCLOSURES FOR PORTFOLIOS SUBJECT TO IRB RISK-BASED CAPITAL FORMULAS—Continued

(e)	The national bank's or Federal savings association's estimates compared against actual outcomes over a longer period. ⁴ At a minimum, this should include information on estimates of losses against actual losses in the wholesale category and each retail subcategory over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each category/subcategory. ⁵ Where appropriate, the national bank or Federal savings association should further decompose this to provide analysis of PD, LGD, and EAD outcomes against settimates provided in the quantitative risk assessment disclosures.
	estimates provided in the quantitative risk assessment disclosures above. ⁶

¹This disclosure item does not require a detailed description of the model in full—it should provide the reader with a broad overview of the model approach, describing definitions of the variables and methods for estimating and validating those variables set out in the quantitative risk disclosures below. This should be done for each of the four category/subcategories. The national bank or Federal savings association must disclose any significant differences in approach to estimating these variables within each category/subcategories.

TABLE 7 TO §3.173—GENERAL DISCLOSURE FOR COUNTERPARTY CREDIT RISK OF OTC DERIVATIVE CONTRACTS, REPO-STYLE TRANSACTIONS, AND ELIGIBLE MARGIN LOANS

Qualitative Disclosures	(a)	The general qualitative disclosure requirement with respect to OTC derivatives, eligible margin loans, and repo-style transactions, including:
		(1) Discussion of methodology used to assign economic capital and credit limits for counterparty credit exposures;
		(2) Discussion of policies for securing collateral, valuing and man-
		aging collateral, and establishing credit reserves;
		(3) Discussion of the primary types of collateral taken;
		(4) Discussion of policies with respect to wrong-way risk exposures; and
		(5) Discussion of the impact of the amount of collateral the national bank or Federal savings association would have to provide if the national bank or Federal savings association were to receive a credit rating downgrade.
Quantitative Disclosures	(b)	Gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held (including type, for example, cash, government securities), and net unsecured credit exposure.¹ Also report measures for EAD used for regulatory capital for these transactions, the notional value of credit derivative hedges purchased for counterparty credit risk protection, and, for national banks or Federal savings associations not using the internal models methodology in §3.132(d), the distribution of current credit exposure by types of credit exposure.²
	(c)	Notional amount of purchased and sold credit derivatives, seg- regated between use for the national bank's or Federal savings association's own credit portfolio and for its intermediation activi- ties, including the distribution of the credit derivative products used, categorized further by protection bought and sold within each product group.
	(d)	The estimate of alpha if the national bank or Federal savings association has received supervisory approval to estimate alpha.

¹Net unsecured credit exposure is the credit exposure after considering the benefits from legally enforceable netting agreements and collateral arrangements, without taking into account haircuts for price volatility, liquidity, etc.

²This may include interest rate derivative contracts, foreign exchange derivative contracts, equity derivative contracts, credit derivatives, commodity or other derivative contracts, repo-style transactions, and eligible margin loans.

bain of Pederal savings association must disclose any significant differences in approach to estimating triese variables within each category/subcategories.

2 The PD, LGD and EAD disclosures in Table 6 (c) to §3.173 should reflect the effects of collateral, qualifying master netting agreements, eligible guarantees and eligible credit derivatives as defined under this part. Disclosure of each PD grade should include the exposure-weighted average PD for each grade. Where a national bank or Federal savings association aggregates PD grades for the purposes of disclosure, this should be a representative breakdown of the distribution of PD grades used for regulatory capital purposes.

3 Outstanding loans and EAD on undrawn commitments can be presented on a combined basis for these disclosures.

4 These disclosures are a way of further informing the reader about the reliability of the information provided in the "quantitative disclosures: Risk assessment" over the long run. The disclosures are requirements from year-end 2010; in the meantime, early adoption is encouraged. The phased implementation is to allow a national bank or Federal savings association sufficient time to build up a longer run of data that will make these disclosures meaningful.

5 This disclosure item is not intended to be prescriptive about the period used for this assessment. Upon implementation, it is expected that a national bank or Federal savings association would provide these disclosures for as long a set of data as possible—for example, if a national bank or Federal savings association has 10 years of data, it might choose to disclose the average default rates for each PD grade over that 10-year period. Annual amounts need not be disclosed.

6 A national bank or Federal savings association must provide this further decomposition where it will allow users greater insight into the reliability of the estimates provided in the "quantitative disclosures: Risk assessment." In particular, it must provide this information where there are material

TABLE 8 TO § 3.173—CREDIT RISK MITIGATION 12

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to credit risk mitigation, including: (1) Policies and processes for, and an indication of the extent to which the national bank or Federal savings association uses, on- or off-balance sheet netting; (2) Policies and processes for collateral valuation and management; (3) A description of the main types of collateral
		(3) A description of the main types of collateral taken by the national bank or Federal savings association:
		 (4) The main types of guarantors/credit derivative counterparties and their creditworthiness; and (5) Information about (market or credit) risk concentrations within the mitigation taken.
Quantitative disclosures	(b)	For each separately disclosed portfolio, the total exposure (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees/credit derivatives.

¹At a minimum, a national bank or Federal savings association must provide the disclosures in Table 8 in relation to credit risk mitigation that has been recognized for the purposes of reducing capital requirements under this subpart. Where relevant, national banks or Federal savings associations are encouraged to give further information about mitigants that have not been recognized for that purpose.

²Credit derivatives and other credit mitigation that are treated for the purposes of this subpart as synthetic securitization exposures should be excluded from the credit risk mitigation disclosures (in Table 8 to §3.173) and included within those relating to securitization (in Table 9 to §3.173).

	TABLE 9 TO § 3	3.173—SECURITIZATION
Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to securitization (including synthetic securitizations), including a discussion of: (1) The national bank's or Federal savings association's objectives for securitizing assets, including the extent to which these activities transfer credit risk of the underlying exposures away from the national bank or Federal savings association to other entities and including the type of risks assumed and retained with resecuritization activity; 1 (2) The nature of the risks (e.g. liquidity risk) inherent in the securitized assets; (3) The roles played by the national bank or Federal savings association in the securitization process 2 and an indication of the extent of the national bank's or Federal savings association's involvement in each of them; (4) The processes in place to monitor changes in the credit and market risk of securitization exposures; including how those processes differ for resecuritization exposures; (5) The national bank's or Federal savings association's policy for mitigating the credit risk retained through securitization and resecuritization exposures; and (6) The risk-based capital approaches that the national bank or Federal savings association follows for its securitization exposures in cluding the type of securitization exposure to which each approach applies. A list of: (1) The type of securitization SPEs that the national bank or Federal savings association, as sponsor, uses to securitize third-party exposures. The national bank or Federal savings association must indicate whether it has exposure to these SPEs, either on- or off-balance sheet; and (2) Affiliated entities: (i) That the national bank or Federal savings association manages or advises; and
	I	sociation sponsors.3

TABLE 9 TO § 3.173—SECURITIZATION—Continued

	(c)	Summary of the national bank's or Federal savings association's accounting policies for securitization activities, including:
		(1) Whether the transactions are treated as sales or financings;(2) Recognition of gain-on-sale;
		(3) Methods and key assumptions and inputs applied in valuing retained or purchased interests;
		(4) Changes in methods and key assumptions and inputs from the previous period for valuing retained interests and impact of the changes;
		(5) Treatment of synthetic securitizations;
		(6) How exposures intended to be securitized are valued and whether they are recorded under subpart E of this part; and
		(7) Policies for recognizing liabilities on the balance sheet for arrangements that could require the national bank or Federal savings association to provide financial support for securitized assets.
	(d)	An explanation of significant changes to any of the quantitative information set forth below since the last reporting period.
Quantitative disclosures	(e)	The total outstanding exposures securitized by the national bank or Federal savings association in securitizations that meet the operational criteria in §3.141 (categorized into traditional/synthetic), by underlying exposure type 5 separately for securitizations of third-party exposures for which the bank acts only as sponsor.
	(f)	For exposures securitized by the national bank or Federal savings
		association in securitizations that meet the operational criteria in § 3.141:
		(1) Amount of securitized assets that are impaired 6/past due categorized by exposure type; and
		(2) Losses recognized by the national bank or Federal savings as- sociation during the current period categorized by exposure type.
	(g)	The total amount of outstanding exposures intended to be
	(1-)	securitized categorized by exposure type.
	(h)	Aggregate amount of: (1) On-balance sheet securitization exposures retained or pur-
		chased categorized by exposure type; and
		(2) Off-balance sheet securitization exposures categorized by exposure type.
	(i)	(1) Aggregate amount of securitization exposures retained or pur-
		chased and the associated capital requirements for these expo- sures, categorized between securitization and resecuritization ex- posures, further categorized into a meaningful number of risk weight bands and by risk-based capital approach (e.g. SA, SFA, or SSFA).
		(2) Exposures that have been deducted entirely from tier 1 capital, CEIOs deducted from total capital (as described in § 3.42(a)(1), and other exposures deducted from total capital should be dis-
	(j)	closed separately by exposure type. Summary of current year's securitization activity, including the amount of exposures securitized (by exposure type), and recognized gain or loss on sale by asset type.
	(k)	Aggregate amount of resecuritization exposures retained or pur-
		chased categorized according to: (1) Exposures to which credit risk mitigation is applied and those not
		applied; and (2) Exposures to guarantors categorized according to guarantor creditworthiness categories or guarantor name.

¹The national bank or Federal savings association must describe the structure of resecuritizations in which it participates; this description must be provided for the main categories of resecuritization products in which the national bank or Federal savings association is active.

²For example, these roles would include originator, investor, servicer, provider of credit enhancement, sponsor, liquidity provider, or swap provider.

³For example, money market mutual funds should be listed individually, and personal and private trusts, should be noted collegisted.

³For example, money market mutual funds should be listed individually, and personal and private trusts, should be noted collectively.

⁴ "Exposures securitized" include underlying exposures originated by the bank, whether generated by them or purchased, and recognized in the balance sheet, from third parties, and third-party exposures included in sponsored transactions. Securitization transactions (including underlying exposures originally on the bank's balance sheet and underlying exposures acquired by the bank from third-party entities) in which the originating bank does not retain any securitization exposure should be shown separately but need only be reported for the year of inception.

⁵ A national bank or Federal savings association is required to disclose exposures regardless of whether there is a capital charge under this part.

⁶ A national bank or Federal savings association must include credit-related other than temporary impairment (OTTI).

⁷ For example, charge-offs/allowances (if the assets remain on the bank's balance sheet) or credit-related OTTI of I/O strips and other retained residual interests, as well as recognition of liabilities for probable future financial support required of the bank with respect to securitized assets.

with respect to securitized assets.

TABLE 10 TO § 3.173—OPERATIONAL RISK

Qualitative disclosures	(a) (b)	The general qualitative disclosure requirement for operational risk. Description of the AMA, including a discussion of relevant internal and external factors considered in the national bank's or Federal savings association's measurement approach. A description of the use of insurance for the purpose of mitigating operational risk.				
TABLE 11 TO § 3.173—EQUITIES NOT SUBJECT TO SUBPART F OF THIS PART						
Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to the equity risk of equity holdings not subject to subpart F of this part, including: (1) Differentiation between holdings on which capital gains are expected and those held for other objectives, including for relationship and strategic reasons; and (2) Discussion of important policies covering the valuation of and accounting for equity holdings not subject to subpart F of this part. This includes the accounting methodology and valuation methodologies used, including key assumptions and practices af-				
Quantitative disclosures	(b)	fecting valuation as well as significant changes in these practices. Carrying value on the balance sheet of equity investments, as well as the fair value of those investments. The types and nature of investments, including the amount that is: (1) Publicly traded; and (2) Non-publicly traded.				
	(d)	The cumulative realized gains (losses) arising from sales and liquidations in the reporting period. (1) Total unrealized gains (losses) 1				
	(f)	(2) Total latent revaluation gains (losses) ² (3) Any amounts of the above included in tier 1 and/or tier 2 capital. Capital requirements categorized by appropriate equity groupings, consistent with the national bank's or Federal savings association's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition re-				

garding total capital requirements.3

TABLE 12 TO § 3.173—INTEREST RATE RISK FOR NON-TRADING ACTIVITIES

Qualitative disclosures	(a)	The general qualitative disclosure requirement, including the nature of interest rate risk for non-trading activities and key assumptions, including assumptions regarding loan prepayments and behavior of non-maturity deposits, and frequency of measurement of interest rate risk for non-trading activities.
Quantitative disclosures	(b)	The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring interest rate risk for non-trading activities, categorized by currency (as appropriate).

§§3.174-3.200 [Reserved]

Subpart F—Risk-Weighted Assets— Market Risk

SOURCE: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§3.201 Purpose, applicability, and reservation of authority.

(a) Purpose. This subpart F establishes risk-based capital requirements for national banks or Federal savings associations with significant exposure to market risk, provides methods for these national banks or Federal savings associations to calculate their standardized measure for market risk and, if applicable, advanced measure for market risk, and establishes public disclosure requirements.

(b) Applicability. (1) This subpart F applies to any national bank or Federal savings association with aggregate trading assets and trading liabilities (as reported in the national bank's or

¹ Unrealized gains (losses) recognized in the balance sheet but not through earnings.
2 Unrealized gains (losses) not recognized either in the balance sheet or through earnings.
3 This disclosure must include a breakdown of equities that are subject to the 0 percent, 20 percent, 100 percent, 400 percent, and 600 percent risk weights, as applicable.

Federal savings association's most recent quarterly [regulatory report]), equal to:

- (i) 10 percent or more of quarter-end total assets as reported on the most recent quarterly [Call Report or FR Y-9C]; or
 - (ii) \$1 billion or more.
- (2) The OCC may apply this subpart to any national bank or Federal savings association if the OCC deems it necessary or appropriate because of the level of market risk of the national bank or Federal savings association or to ensure safe and sound banking practices.
- (3) The OCC may exclude a national bank or Federal savings association that meets the criteria of paragraph (b)(1) of this section from application of this subpart if the OCC determines that the exclusion is appropriate based on the level of market risk of the national bank or Federal savings association and is consistent with safe and sound banking practices.
- (c) Reservation of authority (1) The OCC may require a national bank or Federal savings association to hold an amount of capital greater than otherwise required under this subpart if the OCC determines that the national bank's or Federal savings association's capital requirement for market risk as calculated under this subpart is not commensurate with the market risk of the national bank's or Federal savings association's covered positions. In making determinations under paragraphs (c)(1) through (c)(3) of this section, the OCC will apply notice and response procedures generally in the same manner as the notice and response procedures set forth in 12 CFR 3.404.
- (2) If the OCC determines that the risk-based capital requirement calculated under this subpart by the national bank or Federal savings association for one or more covered positions or portfolios of covered positions is not commensurate with the risks associated with those positions or portfolios, the OCC may require the national bank or Federal savings association to assign a different risk-based capital requirement to the positions or portfolios that more accurately reflects the risk of the positions or portfolios.

- (3) The OCC may also require a national bank or Federal savings association to calculate risk-based capital requirements for specific positions or portfolios under this subpart, or under subpart D or subpart E of this part, as appropriate, to more accurately reflect the risks of the positions.
- (4) Nothing in this subpart limits the authority of the OCC under any other provision of law or regulation to take supervisory or enforcement action, including action to address unsafe or unsound practices or conditions, deficient capital levels, or violations of law.

[78 FR 62157, 62273, 62274, Oct. 11, 2013]

§ 3.202 Definitions.

- (a) Terms set forth in §???.2 and used in this subpart have the definitions assigned thereto in §3.2.
- (b) For the purposes of this subpart, the following terms are defined as follows:

Backtesting means the comparison of a national bank's or Federal savings association's internal estimates with actual outcomes during a sample period not used in model development. For purposes of this subpart, backtesting is one form of out-of-sample testing.

Commodity position means a position for which price risk arises from changes in the price of a commodity.

Corporate debt position means a debt position that is an exposure to a company that is not a sovereign entity, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, a multilateral development bank, a depository institution, a foreign bank, a credit union, a public sector entity, a GSE, or a securitization.

Correlation trading position means:

- (1) A securitization position for which all or substantially all of the value of the underlying exposures is based on the credit quality of a single company for which a two-way market exists, or on commonly traded indices based on such exposures for which a two-way market exists on the indices; or
- (2) A position that is not a securitization position and that hedges

a position described in paragraph (1) of this definition; and

- (3) A correlation trading position does not include:
 - (i) A resecuritization position;
- (ii) A derivative of a securitization position that does not provide a pro rata share in the proceeds of a securitization tranche; or
- (iii) A securitization position for which the underlying assets or reference exposures are retail exposures, residential mortgage exposures, or commercial mortgage exposures.

Covered position means the following positions:

- (1) A trading asset or trading liability (whether on- or off-balance sheet),²⁷ as reported on Call Report, that meets the following conditions:
- (i) The position is a trading position or hedges another covered position; 28 and
- (ii) The position is free of any restrictive covenants on its tradability or the national bank or Federal savings association is able to hedge the material risk elements of the position in a two-way market:
- (2) A foreign exchange or commodity position, regardless of whether the position is a trading asset or trading liability (excluding any structural foreign currency positions that the national bank or Federal savings association chooses to exclude with prior supervisory approval); and
- (3) Notwithstanding paragraphs (1) and (2) of this definition, a covered position does not include:
- (i) An intangible asset, including any servicing asset;
- (ii) Any hedge of a trading position that the OCC determines to be outside the scope of the national bank's or Federal savings association's hedging strategy required in paragraph (a)(2) of §3.203;
- (iii) Any position that, in form or substance, acts as a liquidity facility that provides support to asset-backed commercial paper;
- ²⁷ Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.
- ²⁸ A position that hedges a trading position must be within the scope of the bank's hedging strategy as described in paragraph (a)(2) of section 203 of this subpart.

- (iv) A credit derivative the national bank or Federal savings association recognizes as a guarantee for riskweighted asset amount calculation purposes under subpart D or subpart E of this part;
- (v) Any position that is recognized as a credit valuation adjustment hedge under §3.132(e)(5) or §3.132(e)(6), except as provided in §3.132(e)(6)(vii);
- (vi) Any equity position that is not publicly traded, other than a derivative that references a publicly traded equity and other than a position in an investment company as defined in and registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.), provided that all the underlying equities held by the investment company are publicly traded:
- (vii) Any equity position that is not publicly traded, other than a derivative that references a publicly traded equity and other than a position in an entity not domiciled in the United States (or a political subdivision thereof) that is supervised and regulated in a manner similar to entities described in paragraph (3)(vi) of this definition:
- (viii) Any position a national bank or Federal savings association holds with the intent to securitize; or

(ix) Any direct real estate holding.

Debt position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in interest rates or credit spreads.

Default by a sovereign entity has the same meaning as the term sovereign default under §3.2.

Equity position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in equity prices.

Event risk means the risk of loss on equity or hybrid equity positions as a result of a financial event, such as the announcement or occurrence of a company merger, acquisition, spin-off, or dissolution.

Foreign exchange position means a position for which price risk arises from changes in foreign exchange rates.

General market risk means the risk of loss that could result from broad market movements, such as changes in the

general level of interest rates, credit spreads, equity prices, foreign exchange rates, or commodity prices.

Hedge means a position or positions that offset all, or substantially all, of one or more material risk factors of another position.

Idiosyncratic risk means the risk of loss in the value of a position that arises from changes in risk factors unique to that position.

Incremental risk means the default risk and credit migration risk of a position. Default risk means the risk of loss on a position that could result from the failure of an obligor to make timely payments of principal or interest on its debt obligation, and the risk of loss that could result from bankruptcy, insolvency, or similar proceeding. Credit migration risk means the price risk that arises from significant changes in the underlying credit quality of the position.

Market risk means the risk of loss on a position that could result from movements in market prices.

Resecuritization position means a covered position that is:

- (1) An on- or off-balance sheet exposure to a resecuritization; or
- (2) An exposure that directly or indirectly references a resecuritization exposure in paragraph (1) of this definition.

Securitization means a transaction in which:

- (1) All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties:
- (2) The credit risk associated with the underlying exposures has been separated into at least two tranches that reflect different levels of seniority:
- (3) Performance of the securitization exposures depends upon the performance of the underlying exposures;
- (4) All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities);
- (5) For non-synthetic securitizations, the underlying exposures are not owned by an operating company;

- (6) The underlying exposures are not owned by a small business investment company described in section 302 of the Small Business Investment Act;
- (7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under section 24(Eleventh) of the National Bank Act;
- (8) The OCC may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet exposures is not a securitization based on the transaction's leverage, risk profile, or economic substance:
- (9) The OCC may deem an exposure to a transaction that meets the definition of a securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a securitization based on the transaction's leverage, risk profile, or economic substance; and
 - (10) The transaction is not:
 - (i) An investment fund;
- (ii) A collective investment fund (as defined in [12 CFR 208.34 (Board), 12 CFR 9.18 (OCC)]);
- (iii) An employee benefit plan as defined in paragraphs (3) and (32) of section 3 of ERISA, a "governmental plan" (as defined in 29 U.S.C. 1002(32)) that complies with the tax deferral qualification requirements provided in the Internal Revenue Code, or any similar employee benefit plan established under the laws of a foreign jurisdiction; or
- (iv) Registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*) or foreign equivalents thereof.

Securitization position means a covered position that is:

- (1) An on-balance sheet or off-balance sheet credit exposure (including creditenhancing representations and warranties) that arises from a securitization (including a resecuritization); or
- (2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition.

Sovereign debt position means a direct exposure to a sovereign entity.

Specific risk means the risk of loss on a position that could result from factors other than broad market movements and includes event risk, default risk, and idiosyncratic risk.

Structural position in a foreign currency means a position that is not a trading position and that is:

- (1) Subordinated debt, equity, or minority interest in a consolidated subsidiary that is denominated in a foreign currency;
- (2) Capital assigned to foreign branches that is denominated in a foreign currency;
- (3) A position related to an unconsolidated subsidiary or another item that is denominated in a foreign currency and that is deducted from the national bank's or Federal savings association's tier 1 or tier 2 capital; or
- (4) A position designed to hedge a national bank's or Federal savings association's capital ratios or earnings against the effect on paragraphs (1), (2), or (3) of this definition of adverse exchange rate movements.

Term repo-style transaction means a repo-style transaction that has an original maturity in excess of one business day.

Trading position means a position that is held by the national bank or Federal savings association for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short time frame conforming to trade custom.

Value-at-Risk (VaR) means the estimate of the maximum amount that the value of one or more positions could decline due to market price or rate movements during a fixed holding period within a stated confidence interval.

§ 3.203 Requirements for application of this subpart F.

- (a) Trading positions—(1) Identification of trading positions. A national bank or Federal savings association must have clearly defined policies and procedures for determining which of its trading assets and trading liabilities are trading positions and which of its trading positions are correlation trading positions. These policies and procedures must take into account:
- (i) The extent to which a position, or a hedge of its material risks, can be marked-to-market daily by reference to a two-way market; and
- (ii) Possible impairments to the liquidity of a position or its hedge.
- (2) Trading and hedging strategies. A national bank or Federal savings association must have clearly defined trading and hedging strategies for its trading positions that are approved by senior management of the national bank or Federal savings association.
- (i) The trading strategy must articulate the expected holding period of, and the market risk associated with, each portfolio of trading positions.
- (ii) The hedging strategy must articulate for each portfolio of trading positions the level of market risk the national bank or Federal savings association is willing to accept and must detail the instruments, techniques, and strategies the national bank or Federal savings association will use to hedge the risk of the portfolio.
- (b) Management of covered positions— (1) Active management. A national bank or Federal savings association must have clearly defined policies and procedures for actively managing all covered positions. At a minimum, these policies and procedures must require:
- (i) Marking positions to market or to model on a daily basis;
- (ii) Daily assessment of the national bank's or Federal savings association's ability to hedge position and portfolio risks, and of the extent of market liquidity;
- (iii) Establishment and daily monitoring of limits on positions by a risk control unit independent of the trading business unit;
- (iv) Daily monitoring by senior management of information described in

paragraphs (b)(1)(i) through (b)(1)(iii) of this section:

- (v) At least annual reassessment of established limits on positions by senior management; and
- (vi) At least annual assessments by qualified personnel of the quality of market inputs to the valuation process, the soundness of key assumptions, the reliability of parameter estimation in pricing models, and the stability and accuracy of model calibration under alternative market scenarios.
- (2) Valuation of covered positions. The national bank or Federal savings association must have a process for prudent valuation of its covered positions that includes policies and procedures on the valuation of positions, marking positions to market or to model, independent price verification, and valuation adjustments or reserves. The valuation process must consider, as appropriate, unearned credit spreads, close-out costs, early termination costs, investing and funding costs, liquidity, and model risk.
- (c) Requirements for internal models. (1) A national bank or Federal savings association must obtain the prior written approval of the OCC before using any internal model to calculate its risk-based capital requirement under this subpart.
- (2) A national bank or Federal savings association must meet all of the requirements of this section on an ongoing basis. The national bank or Federal savings association must promptly notify the OCC when:
- (i) The national bank or Federal savings association plans to extend the use of a model that the OCC has approved under this subpart to an additional business line or product type;
- (ii) The national bank or Federal savings association makes any change to an internal model approved by the OCC under this subpart that would result in a material change in the national bank's or Federal savings association's risk-weighted asset amount for a portfolio of covered positions; or
- (iii) The national bank or Federal savings association makes any material change to its modeling assumptions.
- (3) The OCC may rescind its approval of the use of any internal model (in

whole or in part) or of the determination of the approach under §3.209(a)(2)(ii) for a national bank's or Federal savings association's modeled correlation trading positions and determine an appropriate capital requirement for the covered positions to which the model would apply, if the OCC determines that the model no longer complies with this subpart or fails to reflect accurately the risks of the national bank's or Federal savings association's covered positions.

- (4) The national bank or Federal savings association must periodically, but no less frequently than annually, review its internal models in light of developments in financial markets and modeling technologies, and enhance those models as appropriate to ensure that they continue to meet the OCC's standards for model approval and employ risk measurement methodologies that are most appropriate for the national bank's or Federal savings association's covered positions.
- (5) The national bank or Federal savings association must incorporate its internal models into its risk management process and integrate the internal models used for calculating its VaR-based measure into its daily risk management process.
- (6) The level of sophistication of a national bank's or Federal savings association's internal models must be commensurate with the complexity and amount of its covered positions. A national bank's or Federal savings association's internal models may use any of the generally accepted approaches, including but not limited to variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.
- (7) The national bank's or Federal savings association's internal models must properly measure all the material risks in the covered positions to which they are applied.
- (8) The national bank's or Federal savings association's internal models must conservatively assess the risks arising from less liquid positions and positions with limited price transparency under realistic market scenarios.
- (9) The national bank or Federal savings association must have a rigorous

and well-defined process for re-estimating, re-evaluating, and updating its internal models to ensure continued applicability and relevance.

- (10) If a national bank or Federal savings association uses internal models to measure specific risk, the internal models must also satisfy the requirements in paragraph (b)(1) of §3.207.
- (d) Control, oversight, and validation mechanisms. (1) The national bank or Federal savings association must have a risk control unit that reports directly to senior management and is independent from the business trading units.
- (2) The national bank or Federal savings association must validate its internal models initially and on an ongoing basis. The national bank's or Federal savings association's validation process must be independent of the internal models' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:
- (i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the internal models;
- (ii) An ongoing monitoring process that includes verification of processes and the comparison of the national bank's or Federal savings association's model outputs with relevant internal and external data sources or estimation techniques; and
- (iii) An outcomes analysis process that includes backtesting. For internal models used to calculate the VaR-based measure, this process must include a comparison of the changes in the national bank's or Federal savings association's portfolio value that would have occurred were end-of-day positions to remain unchanged (therefore, excluding fees, commissions, reserves, net interest income, and intraday trading) with VaR-based measures during a sample period not used in model development.
- (3) The national bank or Federal savings association must stress test the market risk of its covered positions at a frequency appropriate to each portfolio, and in no case less frequently than quarterly. The stress tests must take into account concentration risk

- (including but not limited to concentrations in single issuers, industries, sectors, or markets), illiquidity under stressed market conditions, and risks arising from the national bank's or Federal savings association's trading activities that may not be adequately captured in its internal models.
- (4) The national bank or Federal savings association must have an internal audit function independent of businessline management that at least annually assesses the effectiveness of the controls supporting the national bank's or Federal savings association's market risk measurement systems, including the activities of the business trading units and independent risk control unit, compliance with policies and procedures, and calculation of the national bank's or Federal savings association's measures for market risk under this subpart. At least annually, the internal audit function must report its findings to the national bank's or Federal savings association's board of directors (or a committee thereof).
- (e) Internal assessment of capital adequacy. The national bank or Federal savings association must have a rigorous process for assessing its overall capital adequacy in relation to its market risk. The assessment must take into account risks that may not be captured fully in the VaR-based measure, including concentration and liquidity risk under stressed market conditions.
- (f) Documentation. The national bank or Federal savings association must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, validation and review processes and results, and internal assessment of capital adequacy.

§3.204 Measure for market risk.

(a) General requirement. (1) A national bank or Federal savings association must calculate its standardized measure for market risk by following the steps described in paragraph (a)(2) of this section. An advanced approaches

national bank or Federal savings association also must calculate an advanced measure for market risk by following the steps in paragraph (a)(2) of this section.

- (2) Measure for market risk. A national bank or Federal savings association must calculate the standardized measure for market risk, which equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for de minimis exposures all as defined under this paragraph (a)(2), (except, that the national bank or Federal savings association may not use the SFA in section 210(b)(2)(vii)(B) of this subpart for purposes of this calculation)[, plus any additional capital requirement established by the OCC]. An advanced approaches national bank or Federal savings association that has completed the parallel run process and that has received notifications from the OCC pursuant to §3.121(d) also must calculate the advanced measure for market risk, which equals the sum of the VaR-based capital requirement. stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for de minimis exposures as defined under this paragraph (a)(2) [, plus any additional capital requirement established by the OCC1.
- (i) VaR-based capital requirement. A national bank's or Federal savings association's VaR-based capital requirement equals the greater of:
- (A) The previous day's VaR-based measure as calculated under §3.205; or
- (B) The average of the daily VaR-based measures as calculated under §3.205 for each of the preceding 60 business days multiplied by three, except as provided in paragraph (b) of this section.
- (ii) Stressed VaR-based capital requirement. A national bank's or Federal savings association's stressed VaR-based capital requirement equals the greater of:

- (A) The most recent stressed VaRbased measure as calculated under §3.206; or
- (B) The average of the stressed VaR-based measures as calculated under §3.206 for each of the preceding 12 weeks multiplied by three, except as provided in paragraph (b) of this section.
- (iii) Specific risk add-ons. A national bank's or Federal savings association's specific risk add-ons equal any specific risk add-ons that are required under §3.207 and are calculated in accordance with §3.210.
- (iv) Incremental risk capital requirement. A national bank's or Federal savings association's incremental risk capital requirement equals any incremental risk capital requirement as calculated under section 208 of this subpart.
- (v) Comprehensive risk capital requirement. A national bank's or Federal savings association's comprehensive risk capital requirement equals any comprehensive risk capital requirement as calculated under section 209 of this subpart.
- (vi) Capital requirement for de minimis exposures. A national bank's or Federal savings association's capital requirement for de minimis exposures equals:
- (A) The absolute value of the fair value of those *de minimis* exposures that are not captured in the national bank's or Federal savings association's VaR-based measure or under paragraph (a)(2)(vi)(B) of this section; and
- (B) With the prior written approval of the OCC, the capital requirement for any *de minimis* exposures using alternative techniques that appropriately measure the market risk associated with those exposures.
- (b) Backtesting. A national bank or Federal savings association must compare each of its most recent 250 business days' trading losses (excluding fees, commissions, reserves, net interest income, and intraday trading) with the corresponding daily VaR-based measures calibrated to a one-day holding period and at a one-tail, 99.0 percent confidence level. A national bank or Federal savings association must begin backtesting as required by this paragraph (b) no later than one year after the later of January 1, 2014 and

the date on which the national bank or Federal savings association becomes subject to this subpart. In the interim, consistent with safety and soundness principles, a national bank or Federal savings association subject to this subpart as of January 1, 2014 should continue to follow backtesting procedures in accordance with the OCC's supervisory expectations.

- (1) Once each quarter, the national bank or Federal savings association must identify the number of exceptions (that is, the number of business days for which the actual daily net trading loss, if any, exceeds the corresponding daily VaR-based measure) that have occurred over the preceding 250 business days.
- (2) A national bank or Federal savings association must use the multiplication factor in Table 1 to §3.204 that corresponds to the number of exceptions identified in paragraph (b)(1) of this section to determine its VaRbased capital requirement for market risk under paragraph (a)(2)(i) of this section and to determine its stressed VaR-based capital requirement for market risk under paragraph (a)(2)(ii) of this section until it obtains the next quarter's backtesting results, unless the OCC notifies the national bank or Federal savings association in writing that a different adjustment or other action is appropriate.

TABLE 1 TO § 3.204—MULTIPLICATION FACTORS BASED ON RESULTS OF BACKTESTING

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

§3.205 VaR-based measure.

(a) General requirement. A national bank or Federal savings association must use one or more internal models to calculate daily a VaR-based measure of the general market risk of all covered positions. The daily VaR-based measure also may reflect the national bank's or Federal savings association's specific risk for one or more portfolios

of debt and equity positions, if the internal models meet the requirements of paragraph (b)(1) of §3.207. The daily VaR-based measure must also reflect the national bank's or Federal savings association's specific risk for any portfolio of correlation trading positions that is modeled under §3.209. A national bank or Federal savings association may elect to include term repostyle transactions in its VaR-based measure, provided that the national bank or Federal savings association includes all such term repostyle transactions consistently over time.

- (1) The national bank's or Federal savings association's internal models for calculating its VaR-based measure must use risk factors sufficient to measure the market risk inherent in all covered positions. The market risk categories must include, as appropriate, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk. For material positions in the major currencies and markets, modeling techniques must incorporate enough segments of the yield curve—in no case less than six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.
- (2) The VaR-based measure may incorporate empirical correlations within and across risk categories, provided the national bank or Federal savings association validates and demonstrates the reasonableness of its process for measuring correlations. If the VaRbased measure does not incorporate empirical correlations across risk categories, the national bank or Federal savings association must add the separate measures from its internal models used to calculate the VaR-based measure for the appropriate market risk categories (interest rate risk, credit spread risk, equity price risk, foreign exchange rate risk, and/or commodity price risk) to determine its aggregate VaR-based measure.
- (3) The VaR-based measure must include the risks arising from the nonlinear price characteristics of options positions or positions with embedded optionality and the sensitivity of the fair value of the positions to changes in the volatility of the underlying rates, prices, or other material risk factors. A

national bank or Federal savings association with a large or complex options portfolio must measure the volatility of options positions or positions with embedded optionality by different maturities and/or strike prices, where material.

- (4) The national bank or Federal savings association must be able to justify to the satisfaction of the OCC the omission of any risk factors from the calculation of its VaR-based measure that the national bank or Federal savings association uses in its pricing models.
- (5) The national bank or Federal savings association must demonstrate to the satisfaction of the OCC the appropriateness of any proxies used to capture the risks of the national bank's or Federal savings association's actual positions for which such proxies are used.
- (b) Quantitative requirements for VaRbased measure. (1) The VaR-based measure must be calculated on a daily basis using a one-tail, 99.0 percent confidence level, and a holding period equivalent to a 10-business-day movement in underlying risk factors, such as rates, spreads, and prices. To calculate VaRbased measures using a 10-business-day holding period, the national bank or Federal savings association may calculate 10-business-day measures directly or may convert VaR-based measures using holding periods other than 10 business days to the equivalent of a 10-business-day holding period. A national bank or Federal savings association that converts its VaR-based measure in such a manner must be able to justify the reasonableness of its approach to the satisfaction of the OCC.
- (2) The VaR-based measure must be based on a historical observation period of at least one year. Data used to determine the VaR-based measure must be relevant to the national bank's or Federal savings association's actual exposures and of sufficient quality to support the calculation of risk-based capital requirements. The national bank or Federal savings association must update data sets at least monthly or more frequently as changes in market conditions or portfolio composition warrant. For a national bank or Federal savings association that

uses a weighting scheme or other method for the historical observation period, the national bank or Federal savings association must either:

- (i) Use an effective observation period of at least one year in which the average time lag of the observations is at least six months; or
- (ii) Demonstrate to the OCC that its weighting scheme is more effective than a weighting scheme with an average time lag of at least six months representing the volatility of the national bank's or Federal savings association's trading portfolio over a full business cycle. A national bank or Federal savings association using this option must update its data more frequently than monthly and in a manner appropriate for the type of weighting scheme.
- (c) A national bank or Federal savings association must divide its portfolio into a number of significant subportfolios approved by the OCC for subportfolio backtesting purposes. These subportfolios must be sufficient to allow the national bank or Federal savings association and the OCC to assess the adequacy of the VaR model at the risk factor level; the OCC will evaluate the appropriateness of these subportfolios relative to the value and composition of the national bank's or Federal savings association's covered positions. The national bank or Federal savings association must retain and make available to the OCC the following information for each subportfolio for each business day over the previous two years (500 business days), with no more than a 60-day lag:
- (1) A daily VaR-based measure for the subportfolio calibrated to a onetail, 99.0 percent confidence level;
- (2) The daily profit or loss for the subportfolio (that is, the net change in price of the positions held in the portfolio at the end of the previous business day); and
- (3) The p-value of the profit or loss on each day (that is, the probability of observing a profit that is less than, or a loss that is greater than, the amount reported for purposes of paragraph (c)(2) of this section based on the model used to calculate the VaR-based measure described in paragraph (c)(1) of this section).

Comptroller of the Currency, Treasury

§3.206 Stressed VaR-based measure.

- (a) General requirement. At least weekly, a national bank or Federal savings association must use the same internal model(s) used to calculate its VaR-based measure to calculate a stressed VaR-based measure.
- Quantitative requirements stressed VaR-based measure. (1) A national bank or Federal savings association must calculate a stressed VaRbased measure for its covered positions using the same model(s) used to calculate the VaR-based measure, subject to the same confidence level and holding period applicable to the VaR-based measure under §3.205, but with model inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the national bank's or Federal savings association's current portfolio.
- (2) The stressed VaR-based measure must be calculated at least weekly and be no less than the national bank's or Federal savings association's VaR-based measure.
- (3) A national bank or Federal savings association must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the national bank's or Federal savings association's stressed VaR-based measure under this section and must be able to provide empirical support for the period used. The national bank or Federal savings association must obtain the prior approval of the OCC for, and notify the OCC if the national bank or Federal savings association makes any material changes to, these policies and procedures. The policies and procedures must address:
- (i) How the national bank or Federal savings association links the period of significant financial stress used to calculate the stressed VaR-based measure to the composition and directional bias of its current portfolio; and
- (ii) The national bank's or Federal savings association's process for selecting, reviewing, and updating the period of significant financial stress used to calculate the stressed VaR-based measure and for monitoring the appropriateness of the period to the national

bank's or Federal savings association's current portfolio.

(4) Nothing in this section prevents the OCC from requiring a national bank or Federal savings association to use a different period of significant financial stress in the calculation of the stressed VaR-based measure.

§ 3.207 Specific risk.

- (a) General requirement. A national bank or Federal savings association must use one of the methods in this section to measure the specific risk for each of its debt, equity, and securitization positions with specific risk.
- (b) Modeled specific risk. A national bank or Federal savings association may use models to measure the specific risk of covered positions as provided in paragraph (a) of section 205 of this subpart (therefore, excluding securitization positions that are not modeled under section 209 of this subpart). A national bank or Federal savings association must use models to measure the specific risk of correlation trading positions that are modeled under §3.209.
- (1) Requirements for specific risk modeling. (i) If a national bank or Federal savings association uses internal models to measure the specific risk of a portfolio, the internal models must:
- (A) Explain the historical price variation in the portfolio;
- (B) Be responsive to changes in market conditions;
- (C) Be robust to an adverse environment, including signaling rising risk in an adverse environment; and
- (D) Capture all material components of specific risk for the debt and equity positions in the portfolio. Specifically, the internal models must:
- (1) Capture event risk and idiosyncratic risk; and
- (2) Capture and demonstrate sensitivity to material differences between positions that are similar but not identical and to changes in portfolio composition and concentrations.
- (ii) If a national bank or Federal savings association calculates an incremental risk measure for a portfolio of debt or equity positions under section 208 of this subpart, the national bank or Federal savings association is not

required to capture default and credit migration risks in its internal models used to measure the specific risk of those portfolios.

- (2) Specific risk fully modeled for one or more portfolios. If the national bank's or Federal savings association's VaRbased measure captures all material aspects of specific risk for one or more of its portfolios of debt, equity, or correlation trading positions, the national bank or Federal savings association has no specific risk add-on for those portfolios for purposes of paragraph (a)(2)(iii) of §3.204.
- (c) Specific risk not modeled. (1) If the national bank's or Federal savings association's VaR-based measure does not capture all material aspects of specific risk for a portfolio of debt, equity, or correlation trading positions, the national bank or Federal savings association must calculate a specific-risk add-on for the portfolio under the standardized measurement method as described in § 3.210.
- (2) A national bank or Federal savings association must calculate a specific risk add-on under the standardized measurement method as described in §3.210 for all of its securitization positions that are not modeled under §3.209.

§3.208 Incremental risk.

(a) General requirement. A national bank or Federal savings association that measures the specific risk of a portfolio of debt positions under §3.207(b) using internal models must calculate at least weekly an incremental risk measure for that portfolio according to the requirements in this section. The incremental risk measure is the national bank's or Federal savings association's measure of potential losses due to incremental risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions. With the prior approval of the OCC, a national bank or Federal savings association may choose to include portfolios of equity positions in its incremental risk model, provided that it consistently includes such equity positions in a manner that is consistent with how the national bank or Federal savings association internally measures and manages the incremental risk of such positions at the portfolio level. If equity positions are included in the model, for modeling purposes default is considered to have occurred upon the default of any debt of the issuer of the equity position. A national bank or Federal savings association may not include correlation trading positions or securitization positions in its incremental risk measure.

- (b) Requirements for incremental risk modeling. For purposes of calculating the incremental risk measure, the incremental risk model must:
- (1) Measure incremental risk over a one-year time horizon and at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.
- (i) A constant level of risk assumption means that the national bank or Federal savings association rebalances, or rolls over, its trading positions at the beginning of each liquidity horizon over the one-year horizon in a manner that maintains the national bank's or Federal savings association's initial risk level. The national bank or Federal savings association must determine the frequency of rebalancing in a manner consistent with the liquidity horizons of the positions in the portfolio. The liquidity horizon of a position or set of positions is the time required for a national bank or Federal savings association to reduce its exposure to, or hedge all of its material risks of, the position(s) in a stressed market. The liquidity horizon for a position or set of positions may not be less than the shorter of three months or the contractual maturity of the position.
- (ii) A constant position assumption means that the national bank or Federal savings association maintains the same set of positions throughout the one-year horizon. If a national bank or Federal savings association uses this assumption, it must do so consistently across all portfolios.
- (iii) A national bank's or Federal savings association's selection of a constant position or a constant risk assumption must be consistent between

Comptroller of the Currency, Treasury

the national bank's or Federal savings association's incremental risk model and its comprehensive risk model described in section 209 of this subpart, if applicable.

- (iv) A national bank's or Federal savings association's treatment of liquidity horizons must be consistent between the national bank's or Federal savings association's incremental risk model and its comprehensive risk model described in section 209, if applicable.
- (2) Recognize the impact of correlations between default and migration events among obligors.
- (3) Reflect the effect of issuer and market concentrations, as well as concentrations that can arise within and across product classes during stressed conditions.
- (4) Reflect netting only of long and short positions that reference the same financial instrument.
- (5) Reflect any material mismatch between a position and its hedge.
- (6) Recognize the effect that liquidity horizons have on dynamic hedging strategies. In such cases, a national bank or Federal savings association must:
- (i) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;
- (ii) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement:
- (iii) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and
- (iv) Capture in the incremental risk model any residual risks arising from such hedging strategies.
- (7) Reflect the nonlinear impact of options and other positions with material nonlinear behavior with respect to default and migration changes.
- (8) Maintain consistency with the national bank's or Federal savings association's internal risk management methodologies for identifying, measuring, and managing risk.
- (c) Calculation of incremental risk capital requirement. The incremental risk capital requirement is the greater of:
- (1) The average of the incremental risk measures over the previous 12 weeks: or

(2) The most recent incremental risk measure.

§ 3.209 Comprehensive risk.

- (a) General requirement. (1) Subject to the prior approval of the OCC, a national bank or Federal savings association may use the method in this section to measure comprehensive risk, that is, all price risk, for one or more portfolios of correlation trading positions.
- (2) A national bank or Federal savings association that measures the price risk of a portfolio of correlation trading positions using internal models must calculate at least weekly a comprehensive risk measure that captures all price risk according to the requirements of this section. The comprehensive risk measure is either:
 - (i) The sum of:
- (A) The national bank's or Federal savings association's modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; and
- (B) A surcharge for the national bank's or Federal savings association's modeled correlation trading positions equal to the total specific risk add-on for such positions as calculated under section 210 of this subpart multiplied by 8.0 percent; or
- (ii) With approval of the OCC and provided the national bank or Federal savings association has met the requirements of this section for a period of at least one year and can demonstrate the effectiveness of the model through the results of ongoing model validation efforts including robust benchmarking, the greater of:
- (A) The national bank's or Federal savings association's modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; or
- (B) The total specific risk add-on that would apply to the bank's modeled correlation trading positions as calculated under section 210 of this subpart multiplied by 8.0 percent.
- (b) Requirements for modeling all price risk. If a national bank or Federal savings association uses an internal model to measure the price risk of a portfolio of correlation trading positions:

- (1) The internal model must measure comprehensive risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.
- (2) The model must capture all material price risk, including but not limited to the following:
- (i) The risks associated with the contractual structure of cash flows of the position, its issuer, and its underlying exposures;
- (ii) Credit spread risk, including nonlinear price risks;
- (iii) The volatility of implied correlations, including nonlinear price risks such as the cross-effect between spreads and correlations:
 - (iv) Basis risk;
- (v) Recovery rate volatility as it relates to the propensity for recovery rates to affect tranche prices; and
- (vi) To the extent the comprehensive risk measure incorporates the benefits of dynamic hedging, the static nature of the hedge over the liquidity horizon must be recognized. In such cases, a national bank or Federal savings association must:
- (A) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;
- (B) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;
- (C) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and
- (D) Capture in the comprehensive risk model any residual risks arising from such hedging strategies;
- (3) The national bank or Federal savings association must use market data that are relevant in representing the risk profile of the national bank's or Federal savings association's correlation trading positions in order to ensure that the national bank or Federal savings association fully captures the material risks of the correlation trading positions in its comprehensive risk measure in accordance with this section: and
- (4) The national bank or Federal savings association must be able to demonstrate that its model is an appro-

- priate representation of comprehensive risk in light of the historical price variation of its correlation trading positions.
- (c) Requirements for stress testing. (1) A national bank or Federal savings association must at least weekly apply specific, supervisory stress scenarios to its portfolio of correlation trading positions that capture changes in:
 - (i) Default rates;
 - (ii) Recovery rates:
 - (iii) Credit spreads;
- (iv) Correlations of underlying exposures; and
- (v) Correlations of a correlation trading position and its hedge.
- (2) Other requirements. (i) A national bank or Federal savings association must retain and make available to the OCC the results of the supervisory stress testing, including comparisons with the capital requirements generated by the national bank's or Federal savings association's comprehensive risk model.
- (ii) A national bank or Federal savings association must report to the OCC promptly any instances where the stress tests indicate any material deficiencies in the comprehensive risk model.
- (d) Calculation of comprehensive risk capital requirement. The comprehensive risk capital requirement is the greater of:
- (1) The average of the comprehensive risk measures over the previous 12 weeks: or
- (2) The most recent comprehensive risk measure.

§ 3.210 Standardized measurement method for specific risk

(a) General requirement. A national bank or Federal savings association must calculate a total specific risk add-on for each portfolio of debt and equity positions for which the national bank's or Federal savings association's VaR-based measure does not capture all material aspects of specific risk and for all securitization positions that are not modeled under §3.209. A national bank or Federal savings association must calculate each specific risk addon in accordance with the requirements of this section. Notwithstanding any other definition or requirement in

this subpart, a position that would have qualified as a debt position or an equity position but for the fact that it qualifies as a correlation trading position under paragraph (2) of the definition of correlation trading position in §3.202, shall be considered a debt position or an equity position, respectively, for purposes of this section 210 of this subpart.

(1) The specific risk add-on for an individual debt or securitization position that represents sold credit protection is capped at the notional amount of the credit derivative contract. The specific risk add-on for an individual debt or securitization position that represents purchased credit protection is capped at the current fair value of the transaction plus the absolute value of the present value of all remaining payments to the protection seller under the transaction. This sum is equal to the value of the protection leg of the transaction.

(2) For debt, equity, or securitization positions that are derivatives with linear payoffs, a national bank or Federal savings association must assign a specific risk-weighting factor to the fair value of the effective notional amount of the underlying instrument or index portfolio, except for a securitization position for which the national bank or Federal savings association directly calculates a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section. A swap must be included as an effective notional position in the underlying instrument or portfolio, with the receiving side treated as a long position and the paying side treated as a short position. For debt, equity, or securitization positions that are derivatives with nonlinear payoffs, a national bank or Federal savings association must risk weight the fair value of the effective notional amount of the underlying instrument or portfolio multiplied by the derivative's delta.

(3) For debt, equity, or securitization positions, a national bank or Federal savings association may net long and short positions (including derivatives) in identical issues or identical indices. A national bank or Federal savings association may also net positions in depositary receipts against an opposite position in an identical equity in dif-

ferent markets, provided that the national bank or Federal savings association includes the costs of conversion.

- (4) A set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge has a specific risk add-on of zero if:
- (i) The debt or securitization position is fully hedged by a total return swap (or similar instrument where there is a matching of swap payments and changes in fair value of the debt or securitization position);
- (ii) There is an exact match between the reference obligation of the swap and the debt or securitization position:
- (iii) There is an exact match between the currency of the swap and the debt or securitization position; and
- (iv) There is either an exact match between the maturity date of the swap and the maturity date of the debt or securitization position; or, in cases where a total return swap references a portfolio of positions with different maturity dates, the total return swap maturity date must match the maturity date of the underlying asset in that portfolio that has the latest maturity date.
- (5) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of paragraph (a)(4) of this section is equal to 20.0 percent of the capital requirement for the side of the transaction with the higher specific risk add-on when:
- (i) The credit risk of the position is fully hedged by a credit default swap or similar instrument:
- (ii) There is an exact match between the reference obligation of the credit derivative hedge and the debt or securitization position;
- (iii) There is an exact match between the currency of the credit derivative hedge and the debt or securitization position; and
- (iv) There is either an exact match between the maturity date of the credit derivative hedge and the maturity date of the debt or securitization position; or, in the case where the credit derivative hedge has a standard maturity date:

- (A) The maturity date of the credit derivative hedge is within 30 business days of the maturity date of the debt or securitization position; or
- (B) For purchased credit protection, the maturity date of the credit derivative hedge is later than the maturity date of the debt or securitization position, but is no later than the standard maturity date for that instrument that immediately follows the maturity date of the debt or securitization position. The maturity date of the credit derivative hedge may not exceed the maturity date of the debt or securitization position by more than 90 calendar days.
- (6) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of either paragraph (a)(4) or (a)(5) of this section, but in which all or substantially all of the price risk has been hedged, is equal to the specific risk add-on for the side of the transaction with the higher specific risk add-on.
- (b) Debt and securitization positions. (1) The total specific risk add-on for a portfolio of debt or securitization positions is the sum of the specific risk

- add-ons for individual debt securitization positions, as computed under this section. To determine the specific risk add-on for individual debt or securitization positions, a national bank or Federal savings association must multiply the absolute value of the current fair value of each net long or net short debt or securitization position in the portfolio by the appropriate specific risk-weighting factor as set forth in paragraphs (b)(2)(i) through (b)(2)(vii) of this section.
- (2) For the purpose of this section, the appropriate specific risk-weighting factors include:
- (i) Sovereign debt positions. (A) In accordance with Table 1 to §3.210, a national bank or Federal savings association must assign a specific riskweighting factor to a sovereign debt position based on the CRC applicable to the sovereign, and, as applicable, the remaining contractual maturity of the position, or if there is no CRC applicable to the sovereign, based on whether the sovereign entity is a member of the OECD. Notwithstanding any other provision in this subpart, sovereign debt positions that are backed by the full faith and credit of the United States are treated as having a CRC of 0.

TABLE 1 TO § 3.210—SPECIFIC RISK-WEIGHTING FACTORS FOR SOVEREIGN DEBT POSITIONS

	Specific risk-weighting factor (in percent)	
CRC: 0-1	0.0	
2–3	Remaining contractual maturity of 6 months or less Remaining contractual maturity of greater than 6 and up to and including 24 months. Remaining contractual maturity exceeds 24 months	0.25 1.0 1.6
4–6	8.0	
7	12.0	
OECD Member with No CRC	0.0	
Non-OECD Member with No CRC	8.0	
Sovereign Default	12.0	

- (B) Notwithstanding paragraph (b)(2)(i)(A) of this section, a national bank or Federal savings association may assign to a sovereign debt position a specific risk-weighting factor that is lower than the applicable specific risk-weighting factor in Table 1 to §3.210 if:
- (1) The position is denominated in the sovereign entity's currency;
- (2) The national bank or Federal savings association has at least an equivalent amount of liabilities in that currency; and

- (3) The sovereign entity allows banks under its jurisdiction to assign the lower specific risk-weighting factor to the same exposures to the sovereign entity.
- (C) A national bank or Federal savings association must assign a 12.0 percent specific risk-weighting factor to a sovereign debt position immediately upon determination a default has occurred; or if a default has occurred within the previous five years.
- (D) A national bank or Federal savings association must assign a 0.0 percent specific risk-weighting factor to a sovereign debt position if the sovereign entity is a member of the OECD and does not have a CRC assigned to it, except as provided in paragraph (b)(2)(i)(C) of this section.
- (E) A national bank or Federal savings association must assign an 8.0 percent specific risk-weighting factor to a sovereign debt position if the sovereign is not a member of the OECD and does not have a CRC assigned to it, except as provided in paragraph (b)(2)(i)(C) of this section.
- (ii) Certain supranational entity and multilateral development bank debt positions. A national bank or Federal savings association may assign a 0.0 percent specific risk-weighting factor to a

- debt position that is an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, or an MDB.
- (iii) GSE debt positions. A national bank or Federal savings association must assign a 1.6 percent specific risk-weighting factor to a debt position that is an exposure to a GSE. Notwithstanding the foregoing, a national bank or Federal savings association must assign an 8.0 percent specific risk-weighting factor to preferred stock issued by a GSE.
- (iv) Depository institution, foreign bank, and credit union debt positions. (A) Except as provided in paragraph (b)(2)(iv)(B) of this section, a national bank or Federal savings association must assign a specific risk-weighting factor to a debt position that is an exposure to a depository institution, a foreign bank, or a credit union, in accordance with Table 2 to §3.210, based on the CRC that corresponds to that entity's home country or the OECD membership status of that entity's home country if there is no CRC applicable to the entity's home country, and, as applicable, the remaining contractual maturity of the position.

Table 2 to § 3.210—Specific Risk-Weighting Factors for Depository Institution, Foreign Bank, and Credit Union Debt Positions

	Specific risk-weighting factor (in percent)	
CRC 0–2 or OECD Member with No CRC	Remaining contractual maturity of 6 months or less Remaining contractual maturity of greater than 6 and up to and including 24 months. Remaining contractual maturity exceeds 24 months	0.25 1.0 1.6
CRC 3	8.0	
CRC 4-7	12.0	
Non-OECD Member with No CRC	8.0	
Sovereign Default	12.0	

(B) A national bank or Federal savings association must assign a specific risk-weighting factor of 8.0 percent to a debt position that is an exposure to a depository institution or a foreign bank that is includable in the depository institution's or foreign bank's regulatory capital and that is not subject

to deduction as a reciprocal holding under § 3.22.

(C) A national bank or Federal savings association must assign a 12.0 percent specific risk-weighting factor to a debt position that is an exposure to a foreign bank immediately upon determination that a default by the foreign bank's home country has occurred or if

§3.210

a default by the foreign bank's home country has occurred within the previous five years.

- (v) PSE debt positions. (A) Except as provided in paragraph (b)(2)(v)(B) of this section, a national bank or Federal savings association must assign a specific risk-weighting factor to a debt position that is an exposure to a PSE in accordance with Tables 3 and 4 to §3.210 depending on the position's categorization as a general obligation or revenue obligation based on the CRC that corresponds to the PSE's home country or the OECD membership status of the PSE's home country if there is no CRC applicable to the PSE's home country, and, as applicable, the remaining contractual maturity of the position, as set forth in Tables 3 and 4 of this section.
- (B) A national bank or Federal savings association may assign a lower

specific risk-weighting factor than would otherwise apply under Tables 3 and 4 of this section to a debt position that is an exposure to a foreign PSE if:

- (1) The PSE's home country allows banks under its jurisdiction to assign a lower specific risk-weighting factor to such position; and
- (2) The specific risk-weighting factor is not lower than the risk weight that corresponds to the PSE's home country in accordance with Tables 3 and 4 of this section.
- (C) A national bank or Federal savings association must assign a 12.0 percent specific risk-weighting factor to a PSE debt position immediately upon determination that a default by the PSE's home country has occurred or if a default by the PSE's home country has occurred within the previous five years.

Table 3 to § 3.210—Specific Risk-Weighting Factors for PSE General Obligation Debt Positions

	General obligation specific risk-weighting factor (in percent)	
CRC 0–2 or OECD Member with No CRC.	Remaining contractual maturity of 6 months or less.	0.25
	Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
	Remaining contractual maturity exceeds 24 months.	1.6
CRC 3	8.0	
CRC 4-7	12.0	
Non-OECD Member with No CRC	. 8.0	
Sovereign Default	12.0	

Table 4 to § 3.210—Specific Risk-Weighting Factors for PSE Revenue Obligation Debt Positions

	Revenue obligation specific risk-weighting factor (in percent)	
CRC 0-1 or OECD Member with No CRC	Remaining contractual maturity of 6 months or less Remaining contractual maturity of greater than 6 and up to and including 24 months.	0.25 1.0
	Remaining contractual maturity exceeds 24 months	1.6
CRC 2–3	8.0	
CRC 4-7	12.0	
Non-OECD Member with No CRC	8.0	

Table 4 to §3.210—Specific Risk-Weighting Factors for PSE Revenue Obligation Debt Positions—Continued

(vi) Corporate debt positions. Except as otherwise provided in paragraph (b)(2)(vi)(B) of this section, a national bank or Federal savings association must assign a specific risk-weighting factor to a corporate debt position in accordance with the investment grade methodology in paragraph (b)(2)(vi)(A) of this section.

(A) Investment grade methodology. (1) For corporate debt positions that are exposures to entities that have issued

and outstanding publicly traded instruments, a national bank or Federal savings association must assign a specific risk-weighting factor based on the category and remaining contractual maturity of the position, in accordance with Table 5 to §3.210. For purposes of this paragraph (b)(2)(vi)(A)(I), the national bank or Federal savings association must determine whether the position is in the investment grade or not investment grade category.

TABLE 5 TO § 3.210—SPECIFIC RISK-WEIGHTING FACTORS FOR CORPORATE DEBT POSITIONS UNDER THE INVESTMENT GRADE METHODOLOGY

Category	Remaining contractual maturity	Specific risk- weighting factor (in percent)
Investment Grade	6 months or less	0.50 2.00 4.00
Non-investment Grade		12.00

- (2) A national bank or Federal savings association must assign an 8.0 percent specific risk-weighting factor for corporate debt positions that are exposures to entities that do not have publicly traded instruments outstanding.
- (B) Limitations. (1) A national bank or Federal savings association must assign a specific risk-weighting factor of at least 8.0 percent to an interest-only mortgage-backed security that is not a securitization position.
- (2) A national bank or Federal savings association shall not assign a corporate debt position a specific risk-weighting factor that is lower than the specific risk-weighting factor that corresponds to the CRC of the issuer's home country, if applicable, in table 1 of this section.
- (vii) Securitization positions. (A) General requirements. (I) A national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association must assign a specific risk-weighting factor to a securitization position using either the simplified supervisory formula approach (SSFA) in paragraph

- (b)(2)(vii)(C) of this section (and §3.211) or assign a specific risk-weighting factor of 100 percent to the position.
- (2) A national bank or Federal savings association that is an advanced approaches national bank or Federal savings association must calculate a specific risk add-on for a securitization position in accordance with paragraph (b)(2)(vii)(B) of this section if the national bank or Federal savings association and the securitization position each qualifies to use the SFA in §3.143. A national bank or Federal savings association that is an advanced approaches national bank or Federal sayings association with a securitization position that does not qualify for the SFA under paragraph (b)(2)(vii)(B) of this section may assign a specific riskweighting factor to the securitization position using the SSFA in accordance with paragraph (b)(2)(vii)(C) of this section or assign a specific risk-weighting factor of 100 percent to the position.
- (3) A national bank or Federal savings association must treat a short securitization position as if it is a long

§ 3.210

securitization position solely for calculation purposes when using the SFA in paragraph (b)(2)(vii)(B) of this section or the SSFA in paragraph (b)(2)(vii)(C) of this section.

- (B) SFA. To calculate the specific risk add-on for a securitization position using the SFA, a national bank or Federal savings association that is an advanced approaches national bank or Federal savings association must set the specific risk add-on for the position equal to the risk-based capital requirement as calculated under §3.143.
- (C) SSFA. To use the SSFA to determine the specific risk-weighting factor for a securitization position, a national bank or Federal savings association must calculate the specific risk-weighting factor in accordance with § 3.211.
- (D) Nth-to-default credit derivatives. A national bank or Federal savings association must determine a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section, or assign a specific risk-weighting factor using the SSFA in paragraph (b)(2)(vii)(C) of this section to an nth-to-default credit derivative in accordance with this paragraph (b)(2)(vii)(D), regardless whether the national bank or Federal savings association is a net protection buyer or net protection seller. A national bank or Federal savings association must determine its position in the $n^{\text{th}}\text{-to-default}$ credit derivative as the largest notional amount of all the underlying exposures.
- (1) For purposes of determining the specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section or the specific risk-weighting factor for an nth-to-default credit derivative using the SSFA in paragraph (b)(2)(vii)(C) of this section the national bank or Federal savings association must calculate the attachment point and detachment point of its position as follows:
- (i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the national bank's or Federal savings association's position to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter A is expressed as a decimal value between zero and one. For purposes of using the

SFA in paragraph (b)(2)(vii)(B) of this section to calculate the specific add-on for its position in an nth-to-default credit derivative, parameter A must be set equal to the credit enhancement level (L) input to the SFA formula in section 143 of this subpart. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the national bank's or Federal savings association's position. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the national bank's or Federal savings association's position.

- (ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the national bank's or Federal savings association's position in the nth-to-default credit derivative to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter A is expressed as a decimal value between zero and one. For purposes of using the SFA in paragraph (b)(2)(vii)(B) of this section to calculate the specific risk add-on for its position in an nth-to-default credit derivative, parameter D must be set to equal the L input plus the thickness of tranche T input to the SFA formula in §3.143 of this subpart.
- (2) A national bank or Federal savings association that does not use the SFA in paragraph (b)(2)(vii)(B) of this section to determine a specific risk-add on, or the SSFA in paragraph (b)(2)(vii)(C) of this section to determine a specific risk-weighting factor for its position in an n^{th} -to-default credit derivative must assign a specific risk-weighting factor of 100 percent to the position.
- (c) Modeled correlation trading positions. For purposes of calculating the comprehensive risk measure for modeled correlation trading positions under either paragraph (a)(2)(i) or (a)(2)(ii) of §3.209, the total specific risk add-on is the greater of:
- (1) The sum of the national bank's or Federal savings association's specific risk add-ons for each net long correlation trading position calculated under this section: or

- (2) The sum of the national bank's or Federal savings association's specific risk add-ons for each net short correlation trading position calculated under this section.
- (d) Non-modeled securitization positions. For securitization positions that are not correlation trading positions and for securitizations that are correlation trading positions not modeled under § 3.209, the total specific risk addon is the greater of:
- (1) The sum of the national bank's or Federal savings association's specific risk add-ons for each net long securitization position calculated under this section; or
- (2) The sum of the national bank's or Federal savings association's specific risk add-ons for each net short securitization position calculated under this section.
- (e) Equity positions. The total specific risk add-on for a portfolio of equity positions is the sum of the specific risk add-ons of the individual equity positions, as computed under this section. To determine the specific risk add-on of individual equity positions, a national bank or Federal savings association must multiply the absolute value of the current fair value of each net long or net short equity position by the appropriate specific risk-weighting factor as determined under this paragraph (e):
- (1) The national bank or Federal savings association must multiply the absolute value of the current fair value of each net long or net short equity position by a specific risk-weighting factor of 8.0 percent. For equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the absolute value of the current fair value of each net long or net short position is multiplied by a specific risk-weighting factor of 2.0 percent.²⁹
- (2) For equity positions arising from the following futures-related arbitrage strategies, a national bank or Federal savings association may apply a 2.0 percent specific risk-weighting factor
- ²⁹A portfolio is well-diversified if it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total fair value

- to one side (long or short) of each position with the opposite side exempt from an additional capital requirement:
- (i) Long and short positions in exactly the same index at different dates or in different market centers; or
- (ii) Long and short positions in index contracts at the same date in different, but similar indices.
- (3) For futures contracts on main indices that are matched by offsetting positions in a basket of stocks comprising the index, a national bank or Federal savings association may apply a 2.0 percent specific risk-weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks is comprised of stocks representing at least 90.0 percent of the capitalization of the index. A main index refers to the Standard & Poor's 500 Index, the FTSE All-World Index, and any other index for which the national bank or Federal savings association can demonstrate to the satisfaction of the OCC that the equities represented in the index have liquidity, depth of market, and size of bid-ask spreads comparable to equities in the Standard & Poor's 500 Index and FTSE All-World Index.
- (f) Due diligence requirements for securitization positions. (1) A national bank or Federal savings association must demonstrate to the satisfaction of the OCC a comprehensive understanding of the features of a securitization position that would materially affect the performance of the position by conducting and documenting the analysis set forth in paragraph (f)(2) of this section. The national bank's or Federal savings association's analysis must be commensurate with the complexity of the securitization position and the materiality of the position in relation to capital.
- (2) A national bank or Federal savings association must demonstrate its comprehensive understanding for each securitization position by:
- (i) Conducting an analysis of the risk characteristics of a securitization position prior to acquiring the position and document such analysis within three

§ 3.211

business days after acquiring position, considering:

- (A) Structural features of the securitization that would materially impact the performance of the position, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the performance of organizations that service the position, and deal-specific definitions of default:
- (B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);
- (C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and
- (D) For resecuritization positions, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures.
- (ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under paragraph (f)(1) of this section for each securitization position.

§ 3.211 Simplified supervisory formula approach (SSFA).

(a) General requirements. To use the SSFA to determine the specific risk-weighting factor for a securitization position, a national bank or Federal savings association must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization require payments on

- a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. A national bank or Federal savings association that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a specific risk-weighting factor of 100 percent to the position.
- (b) SSFA parameters. To calculate the specific risk-weighting factor for a securitization position using the SSFA, a national bank or Federal savings association must have accurate information on the five inputs to the SSFA calculation described in paragraphs (b)(1) through (b)(5) of this section.
- (1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using subpart D. K_G is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of K_G equal to 0.08).
- (2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:
- (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;
 - (iii) In the process of foreclosure;
 - (iv) Held as real estate owned;
- (v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:
- (A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or
- (B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or
- (vi) Is in default.

- (3) Parameter A is the attachment point for the position, which represents the threshold at which credit losses will first be allocated to the position. provided Except as in §3.210(b)(2)(vii)(D) for nth-to-default credit derivatives, parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the position of the national bank or Federal savings association to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the position that contains the national bank's or Federal savings association's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.
- (4) Parameter D is the detachment point for the position, which represents the threshold at which credit losses of principal allocated to the position would result in a total loss of principal. Except as provided in 3.210(b)(2)(vii)(D) for n^{th} -to-default credit derivatives, parameter D equals parameter A plus the ratio of the curdollar amount securitization positions that are pari passu with the position (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.
- (5) A supervisory calibration parameter, p, is equal to 0.5 for securitization

- positions that are not resecuritization positions and equal to 1.5 for resecuritization positions.
- (c) Mechanics of the SSFA. K_G and W are used to calculate $K_{\mbox{\scriptsize A}},$ the augmented value of K_G, which reflects the observed credit quality of the underlying exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D, relative to KA determine the specific risk-weighting factor assigned to a position as described in this paragraph (c) and paragraph (d) of this section. The specific riskfactor assigned weighting to securitization position, or portion of a position, as appropriate, is the larger of the specific risk-weighting factor determined in accordance with this paragraph (c), paragraph (d) of this section, and a specific risk-weighting factor of 1.6 percent.
- (1) When the detachment point, parameter D, for a securitization position is less than or equal to K_A , the position must be assigned a specific risk-weighting factor of 100 percent.
- (2) When the attachment point, parameter A, for a securitization position is greater than or equal to K_A , the national bank or Federal savings association must calculate the specific riskweighting factor in accordance with paragraph (d) of this section.
- (3) When A is less than K_A and D is greater than K_A , the specific risk-weighting factor is a weighted-average of 1.00 and $K_{\rm SSFA}$ calculated under paragraphs (c)(3)(i) and (c)(3)(ii) of this section. For the purpose of this calculation:
 - (i) The weight assigned to 1.00 equals

§3.212

(ii) The weight assigned to K_{SSFA} equals $\frac{D-K_A}{D-A}$. The specific risk-weighting factor is equal to:

$$SRWF = 100 \cdot \left[\left(\frac{K_A - A}{D - A} \right) \cdot 1.00 \right] + \left[\left(\frac{D - K_A}{D - A} \right) \cdot K_{SSFA} \right]$$

(d) SSFA equation. (1) The [BANK] must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$a = -\frac{1}{p \cdot K_A}$$

$$u = D - K_A$$

$$l = \max(A - K_A, 0)$$

e = 2.71828, the base of the natural logarithms.

(2) Then the [BANK] must calculate K_{SSFA} according to the following formula:

$$K_{SSFA} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u - l)}$$

(3) The specific risk-weighting factor for the position (expressed as a percent) is equal to $K_{SSFA} \times 100$.

§ 3.212 Market risk disclosures.

(a) Scope. A national bank or Federal savings association must comply with this section unless it is a consolidated subsidiary of a bank holding company or a depository institution that is subject to these requirements or of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction. A national bank or Federal savings association must make timely public disclosures each calendar quarter. If a significant change occurs, such that the most recent reporting amounts are no longer reflective of the national bank's or Federal savings association's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be provided as soon as

practicable thereafter. Qualitative disclosures that typically do not change each quarter may be disclosed annually, provided any significant changes are disclosed in the interim. If a national bank or Federal savings association believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public certain information that is either proprietary or confidential in nature, the national bank or Federal savings association is not required to disclose these specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed. The national bank's or Federal savings association's management may provide all of the disclosures required by this section in one place on the national bank's or Federal savings association's public Web site or may provide the disclosures in more than one public financial report or other regulatory reports, provided that the national bank or Federal savings association publicly provides a summary table specifically indicating the location(s) of all such disclosures.

- (b) Disclosure policy. The national bank or Federal savings association must have a formal disclosure policy approved by the board of directors that addresses the national bank's or Federal savings association's approach for determining its market risk disclosures. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management must ensure that appropriate verification of the disclosures takes place and that effective internal controls and disclosure controls and procedures are maintained. One or more senior officers of the national bank or Federal savings association must attest that the disclosures meet the requirements of this subpart, and the board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this section.
- (c) Quantitative disclosures. (1) For each material portfolio of covered positions, the national bank or Federal savings association must provide timely public disclosures of the following information at least quarterly:
- (i) The high, low, and mean VaRbased measures over the reporting period and the VaR-based measure at period-end;
- (ii) The high, low, and mean stressed VaR-based measures over the reporting period and the stressed VaR-based measure at period-end;
- (iii) The high, low, and mean incremental risk capital requirements over the reporting period and the incremental risk capital requirement at period-end;
- (iv) The high, low, and mean comprehensive risk capital requirements

over the reporting period and the comprehensive risk capital requirement at period-end, with the period-end requirement broken down into appropriate risk classifications (for example, default risk, migration risk, correlation risk);

- (v) Separate measures for interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk used to calculate the VaR-based measure; and
- (vi) A comparison of VaR-based estimates with actual gains or losses experienced by the national bank or Federal savings association, with an analysis of important outliers.
- (2) In addition, the national bank or Federal savings association must disclose publicly the following information at least quarterly:
- (i) The aggregate amount of on-balance sheet and off-balance sheet securitization positions by exposure type; and
- (ii) The aggregate amount of correlation trading positions.
- (d) Qualitative disclosures. For each material portfolio of covered positions, the national bank or Federal savings association must provide timely public disclosures of the following information at least annually after the end of the fourth calendar quarter, or more frequently in the event of material changes for each portfolio:
- (1) The composition of material portfolios of covered positions;
- (2) The national bank's or Federal savings association's valuation policies, procedures, and methodologies for covered positions including, for securitization positions, the methods and key assumptions used for valuing such positions, any significant changes since the last reporting period, and the impact of such change;
- (3) The characteristics of the internal models used for purposes of this subpart. For the incremental risk capital requirement and the comprehensive risk capital requirement, this must include:
- (i) The approach used by the national bank or Federal savings association to determine liquidity horizons;
- (ii) The methodologies used to achieve a capital assessment that is

§§ 3.213-3.299

consistent with the required soundness standard; and

- (iii) The specific approaches used in the validation of these models;
- (4) A description of the approaches used for validating and evaluating the accuracy of internal models and modeling processes for purposes of this subpart;
- (5) For each market risk category (that is, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk), a description of the stress tests applied to the positions subject to the factor:
- (6) The results of the comparison of the national bank's or Federal savings association's internal estimates for purposes of this subpart with actual outcomes during a sample period not used in model development;
- (7) The soundness standard on which the national bank's or Federal savings association's internal capital adequacy assessment under this subpart is based, including a description of the methodologies used to achieve a capital adequacy assessment that is consistent with the soundness standard:
- (8) A description of the national bank's or Federal savings association's processes for monitoring changes in the credit and market risk of

securitization positions, including how those processes differ for resecuritization positions; and

(9) A description of the national bank's or Federal savings association's policy governing the use of credit risk mitigation to mitigate the risks of securitization and resecuritization positions

§§ 3.213-3.299 [Reserved]

Subpart G—Transition Provisions

SOURCE: 78 FR 62157, 62273, Oct. 11, 2013, unless otherwise noted.

§ 3.300 Transitions.

- (a) Capital conservation and countercyclical capital buffer. (1) From January 1, 2014 through December 31, 2015, a national bank or Federal savings association is not subject to limits on distributions and discretionary bonus payments under §3.11 of subpart B of this part notwithstanding the amount of its capital conservation buffer or any applicable countercyclical capital buffer amount.
- (2) Beginning January 1, 2016 through December 31, 2018 a national bank's or Federal savings association's maximum payout ratio shall be determined as set forth in Table 1 to §3.300.

TABLE 1 TO § 3.300

Transition period	Capital conservation buffer	Maximum payout ratio (as a percentage of eligible retained income)
Calendar year 2016.	Greater than 0.625 percent (plus 25 percent of any applicable countercyclical capital buffer amount).	No payout ratio limitation applies under this section.
	Less than or equal to 0.625 percent (plus 25 percent of any applicable counter- cyclical capital buffer amount), and greater than 0.469 percent (plus 17.25 per- cent of any applicable countercyclical capital buffer amount).	60 percent.
	Less than or equal to 0.469 percent (plus 17.25 percent of any applicable countercyclical capital buffer amount), and greater than 0.313 percent (plus 12.5 percent of any applicable countercyclical capital buffer amount).	40 percent.
	Less than or equal to 0.313 percent (plus 12.5 percent of any applicable counter- cyclical capital buffer amount), and greater than 0.156 percent (plus 6.25 per- cent of any applicable countercyclical capital buffer amount).	20 percent.
	Less than or equal to 0.156 percent (plus 6.25 percent of any applicable counter- cyclical capital buffer amount).	0 percent.
Calendar year 2017.	Greater than 1.25 percent (plus 50 percent of any applicable countercyclical capital buffer amount).	No payout ratio limitation applies under this section.
	Less than or equal to 1.25 percent (plus 50 percent of any applicable counter- cyclical capital buffer amount), and greater than 0.938 percent (plus 37.5 per- cent of any applicable countercyclical capital buffer amount).	60 percent.
	Less than or equal to 0.938 percent (plus 37.5 percent of any applicable counter- cyclical capital buffer amount), and greater than 0.625 percent (plus 25 percent of any applicable countercyclical capital buffer amount).	40 percent.

TABLE 1 TO § 3.300—Continued

Transition period	Capital conservation buffer	Maximum payout ratio (as a percentage of eligible retained income)
	Less than or equal to 0.625 percent (plus 25 percent of any applicable counter- cyclical capital buffer amount), and greater than 0.313 percent (plus 12.5 per- cent of any applicable countercyclical capital buffer amount).	20 percent.
	Less than or equal to 0.313 percent (plus 12.5 percent of any applicable counter- cyclical capital buffer amount).	0 percent.
Calendar year 2018.	Greater than 1.875 percent (plus 75 percent of any applicable countercyclical capital buffer amount).	No payout ratio limitation applies under this section.
	Less than or equal to 1.875 percent (plus 75 percent of any applicable counter- cyclical capital buffer amount), and greater than 1.406 percent (plus 56.25 per- cent of any applicable countercyclical capital buffer amount).	60 percent.
	Less than or equal to 1.406 percent (plus 56.25 percent of any applicable countercyclical capital buffer amount), and greater than 0.938 percent (plus 37.5 percent of any applicable countercyclical capital buffer amount).	40 percent.
	Less than or equal to 0.938 percent (plus 37.5 percent of any applicable counter- cyclical capital buffer amount), and greater than 0.469 percent (plus 18.75 per- cent of any applicable countercyclical capital buffer amount).	20 percent.
	Less than or equal to 0.469 percent (plus 18.75 percent of any applicable countercyclical capital buffer amount).	0 percent.

- (b) Regulatory capital adjustments and deductions. Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank or Federal savings association must make the capital adjustments and deductions in §3.22 in accordance with the transition requirements in this paragraph (b). Beginning January 1, 2018, a national bank or Federal savings association must make all regulatory capital adjustments and deductions in accordance with §3.22.
- (1) Transition deductions from common equity tier 1 capital. Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national

- bank or Federal savings association, must make the deductions required under §3.22(a)(1)–(8) from common equity tier 1 or tier 1 capital elements in accordance with the percentages set forth in Table 2 and Table 3 to §3.300.
- (i) A national bank or Federal savings association must deduct the following items from common equity tier 1 and additional tier 1 capital in accordance with the percentages set forth Table 2 to §3.300: goodwill (§3.22(a)(1)), DTAs that arise from net and tax credit operating loss carryforwards (§3.22(a)(3)), a gain-onsale in connection with a securitization exposure (§3.22(a)(4)), defined benefit pension fund assets (§3.22(a)(5)), expected credit loss that exceeds eligible credit reserves (for advanced approaches national banks or Federal savings associations that have completed the parallel run process and that have received notifications from the OCC pursuant to §3.121(d) of subpart E) and financial subsidiaries (§3.22(a)(7)), and nonincludable subsidiaries of a Federal savings association $(\S 3.22(a)(8)).$

TABLE 2 TO § 3.300

17.522.2.10 30.000			
	Transition deductions under § 3.22(a)(1) and (7)	Transition deductions under § 3.22(a)(3)–(6) and (8)	
Transition period	sition period Percentage of the deductions from common equity tier 1 capital		Percentage of the deductions from tier 1 capital
Calendar year 2014	100 100 100 100 100	20 40 60 80 100	80 60 40 20 0

(ii) A national bank or Federal savings association must deduct from common equity tier 1 capital any intangible assets other than goodwill and MSAs in accordance with the percentages set forth in Table 3 to §3.300.

(iii) A national bank or Federal savings association must apply a 100 percent risk-weight to the aggregate amount of intangible assets other than goodwill and MSAs that are not required to be deducted from common equity tier 1 capital under this section.

TABLE 3 TO § 3.300

Transition period	Transition deductions under § 3.22(a)(2)— percentage of the deductions from common equity tier 1 capital
Calendar year 2014 Calendar year 2015 Calendar year 2016 Calendar year 2017 Calendar year 2017 Calendar year 2018, and thereafter	20 40 60 80 100

(2) Transition adjustments to common equity tier 1 capital. Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank or Federal savings association, must allocate the regulatory adjustments related to changes in the fair value of liabilities due to changes in the national bank's or Federal savings association's own credit risk (§3.22(b)(1)(iii)) between common equity tier 1 capital and tier 1 capital in accordance with the percentages set forth in Table 4 to §3.300.

- (i) If the aggregate amount of the adjustment is positive, the national bank or Federal savings association must allocate the deduction between common equity tier 1 and tier 1 capital in accordance with Table 4 to §3.300.
- (ii) If the aggregate amount of the adjustment is negative, the national bank or Federal savings association must add back the adjustment to common equity tier 1 capital or to tier 1 capital, in accordance with Table 4 to §3.300.

TABLE 4 TO § 3.300

	Transition adjustments under § 3.22(b)(2)	
Transition period	Percentage of the adjustment applied to common equity tier 1 capital	Percentage of the adjustment applied to tier 1 capital
Calendar year 2014 Calendar year 2015 Calendar year 2016 Calendar year 2017 Calendar year 2017 Calendar year 2018, and thereafter	40 60	80 60 40 20 0

- (3) Transition adjustments to AOCI for an advanced approaches national bank or Federal savings association and a national bank or Federal savings association that has not made an AOCI opt-out election under §3.22(b)(2). Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association that has not made an AOCI opt-out election under §3.22(b)(2), and in each case through December 31, 2017, a national bank or Federal savings association must adjust common equity tier 1 capital with respect to the transition AOCI adjustment amount (transition AOCI adjustment amount):
- (i) The transition AOCI adjustment amount is the aggregate amount of a national bank's or Federal savings association's:
- (A) Unrealized gains on available-forsale securities that are preferred stock classified as an equity security under GAAP or available-for-sale equity exposures, plus
- (B) Net unrealized gains or losses on available-for-sale securities that are not preferred stock classified as an eq-

- uity security under GAAP or availablefor-sale equity exposures, plus
- (C) Any amounts recorded in AOCI attributed to defined benefit postretirement plans resulting from the initial and subsequent application of the relevant GAAP standards that pertain to such plans (excluding, at the national bank's or Federal savings association's option, the portion relating to pension assets deducted under section 22(a)(5)), plus
- (D) Accumulated net gains or losses on cash flow hedges related to items that are reported on the balance sheet at fair value included in AOCI, plus
- (E) Net unrealized gains or losses on held-to-maturity securities that are included in AOCI.
- (ii) A national bank or Federal savings association must make the following adjustment to its common equity tier 1 capital:
- (A) If the transition AOCI adjustment amount is positive, the appropriate amount must be deducted from common equity tier 1 capital in accordance with Table 5 to §3.300.
- (B) If the transition AOCI adjustment amount is negative, the appropriate amount must be added back to common equity tier 1 capital in accordance with Table 5 to §3.300.

TABLE 5 TO § 3.300

Transition period	Percentage of the transition AOCI adjustment amount to be applied to common equity tier 1 capital
Calendar year 2014	80
Calendar year 2015	60
Calendar year 2016	40
Calendar year 2017	20
Calendar year 2018 and thereafter	0

(iii) A national bank or Federal savings association may include in tier 2 capital the percentage of unrealized gains on available-for-sale preferred

stock classified as an equity security under GAAP and available-for-sale equity exposures as set forth in Table 6 to §3.300.

TABLE 6 TO § 3.300

Transition period	Percentage of unrealized gains on available- for-sale preferred stock classified as an equity security under GAPA and available- for-sale equity exposures that may be included in tier 2 capital
Calendar year 2014	36
Calendar year 2015	27
Calendar year 2016	18
Calendar year 2017	9

TABLE 6 TO § 3.300—Continued

Transition period	Percentage of unrealized gains on available- for-sale preferred stock classified as an equity security under GAAP and available- for-sale equity exposures that may be included in tier 2 capital
Calendar year 2018 and thereafter	0

(4) Additional transition deductions from regulatory capital. (i) Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank or Federal savings association, must use Table 7 to §3.300 to determine the amount of investments in capital instruments and the items subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds (§3.22(d)) (that is, MSAs, DTAs arising from temporary differences that the national bank or Federal savings association could not realize through net operating loss carrybacks, and significant investments in the capital of unconsolidated financial institutions in the form of common stock) that must be deducted from common equity tier 1 capital.

(ii) Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank or Federal savings association must apply a 100 percent risk-weight to the aggregate amount of the items subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds that are not deducted under this section. As set forth in §3.22(d)(2), beginning January 1, 2018, a national bank or Federal savings association must apply a 250 percent risk-weight to the aggregate amount of the items subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds that are not deducted from common equity tier 1 capital.

TABLE 7 TO § 3.300

Transition period	Transitions for deductions under § 3.22(c) and (d)—Percentage of additional deductions from regulatory capital	
Calendar year 2014	20	
Calendar year 2015	40	
Calendar year 2016	60	
Calendar year 2017	80	
Calendar year 2018 and thereafter	100	

(iii) For purposes of calculating the transition deductions in this paragraph (b)(4) beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank's or Federal savings association's 15 percent

common equity tier 1 capital deduction threshold for MSAs, DTAs arising from temporary differences that the national bank or Federal savings association could not realize through net operating loss carrybacks, and significant investments in the capital of unconsolidated financial institutions in the form of common stock is equal to 15 percent of the sum of the national bank's or Federal savings association's common equity tier 1 elements, after

regulatory adjustments and deductions required under §3.22(a) through (c) (transition 15 percent common equity tier 1 capital deduction threshold).

- (iv) Beginning January 1, 2018, a national bank or Federal savings association must calculate the 15 percent common equity tier 1 capital deduction threshold in accordance with §3.22(d).
- (c) Non-qualifying capital instruments (1)—(3) [Reserved]
- (4) Depository institutions. (i) Beginning on January 1, 2014, a depository institution that is an advanced approaches national bank or Federal savings association, and beginning on January 1, 2015, all other depository institutions, may include in regulatory capital debt or equity instruments issued prior to September 12, 2010 that do not meet the criteria for additional tier 1

or tier 2 capital instruments in §3.20 but that were included in tier 1 or tier 2 capital respectively as of September 12, 2010 (non-qualifying capital instruments issued prior to September 12, 2010) up to the percentage of the outstanding principal amount of such non-qualifying capital instruments as of January 1, 2014 in accordance with Table 9 to §3.300.

(ii) Table 9 to §3.300 applies separately to tier 1 and tier 2 non-qualifying capital instruments.

(iii) The amount of non-qualifying capital instruments that cannot be included in additional tier 1 capital under this section may be included in tier 2 capital without limitation, provided that the instruments meet the criteria for tier 2 capital instruments under §3.20(d).

TABLE 9 TO § 3.300

Transition period (calendar year)	Percentage of non-qualifying capital instruments includable in additional tier 1 or tier 2 capital
Calendar year 2014	80
Calendar year 2015	70
Calendar year 2016	60
Calendar year 2017	50
Calendar year 2018	40
Calendar year 2019	30
Calendar year 2020	20
Calendar year 2021	10
Calendar year 2022 and thereafter	0

(d) Minority interest—(1) Surplus minority interest. Beginning January 1. 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank or Federal savings association may include in common equity tier 1 capital, tier 1 capital, or total capital the percentage of the common equity tier 1 minority interest, tier 1 minority interest and total capital minority interest outstanding as of January 1, 2014 that exceeds any common equity tier 1 minority interest, tier 1 minority interest or total capital minority interest includable under §3.21 (surplus minority interest), respectively, as set forth in Table 10 to §3.300.

(2) Non-qualifying minority interest. Beginning January 1, 2014 for an advanced approaches national bank or Federal savings association, and beginning January 1, 2015 for a national bank or Federal savings association that is not an advanced approaches national bank or Federal savings association, and in each case through December 31, 2017, a national bank or Federal savings association may include in tier 1 capital or total capital the percentage of the tier 1 minority interest and total capital minority interest outstanding as of January 1, 2014 that does not meet the criteria for additional tier 1 or tier 2 capital instruments in §3.20 (non-qualifying minority interest), as set forth in Table 10 to §3.300.

TABLE 10 TO § 3.300

Transition period	Percentage of the amount of surplus or non- qualifying minority interest that can be included in regulatory capital during the transition period
Calendar year 2014 Calendar year 2015 Calendar year 2016 Calendar year 2017 Calendar year 2018 and thereafter	80 60 40 20 0

(e) Prompt corrective action. For purposes of 12 CFR part 6, a national bank or Federal savings association must calculate its capital measures and tangible equity ratio in accordance with the transition provisions in this section.

 $[78 \ \mathrm{FR} \ 62157, \, 62273, \, 62274, \, \mathrm{Oct.} \ 11, \, 2013]$

Subpart H—Establishment of Minimum Capital Ratios for an Individual Bank or Individual Federal Savings Association

Source: 78 FR 62269, Oct. 11, 2013, unless otherwise noted.

$\S 3.401$ Purpose and scope.

The rules and procedures specified in this subpart are applicable to a proceeding to establish required minimum capital ratios that would otherwise be applicable to a national bank or Federal savings association under subpart B of this part. The OCC is authorized under 12 U.S.C. 1464(s)(2) and 3907(a)(2) to establish such minimum capital requirements for a national bank or Federal savings association as the OCC, in its discretion, deems appropriate in light of the particular circumstances at that national bank or Federal savings association. Proceedings under this subpart also may be initiated to require a national bank or Federal savings association having capital ratios above those set forth in subpart B of this part, or other legal authority to continue to maintain those higher ratios.

§ 3.402 Applicability.

The OCC may require higher minimum capital ratios for an individual national bank or Federal savings association in view of its circumstances.

For example, higher capital ratios may be appropriate for:

- (a) A newly chartered national bank or Federal savings association;
- (b) A national bank or Federal savings association receiving special supervisory attention:
- (c) A national bank or Federal savings association that has, or is expected to have, losses resulting in capital inadequacy;
- (d) A national bank or Federal savings association with significant exposure due to the risks from concentrations of credit, certain risks arising from nontraditional activities, or management's overall inability to monitor and control financial and operating risks presented by concentrations of credit and nontraditional activities;
- (e) A national bank or Federal savings association with significant exposure to declines in the economic value of its capital due to changes in interest rates:
- (f) A national bank or Federal savings association with significant exposure due to fiduciary or operational risk:
- (g) A national bank or Federal savings association exposed to a high degree of asset depreciation, or a low level of liquid assets in relation to short term liabilities;
- (h) A national bank or Federal savings association exposed to a high volume of, or particularly severe, problem loans:
- (i) A national bank or Federal savings association that is growing rapidly, either internally or through acquisitions; or
- (j) A national bank or Federal savings association that may be adversely affected by the activities or condition of its holding company, affiliate(s), or other persons or institutions, including chain banking organizations, with

which it has significant business relationships.

§ 3.403 Standards for determination of appropriate individual minimum capital ratios.

The appropriate minimum capital ratios for an individual national bank or Federal savings association cannot be determined solely through the application of a rigid mathematical formula or wholly objective criteria. The decision is necessarily based in part on subjective judgment grounded in agency expertise. The factors to be considered in the determination will vary in each case and may include, for example:

- (a) The conditions or circumstances leading to the OCC's determination that higher minimum capital ratios are appropriate or necessary for the national bank or Federal savings association:
- (b) The exigency of those circumstances or potential problems;
- (c) The overall condition, management strength, and future prospects of the national bank or Federal savings association and, if applicable, its holding company and/or affiliate(s);
- (d) The national bank's or Federal savings association's liquidity, capital, risk asset and other ratios compared to the ratios of its peer group; and
- (e) The views of the national bank's or Federal savings association's directors and senior management.

§ 3.404 Procedures.

- (a) Notice. When the OCC determines that minimum capital ratios above those set forth in subpart B of this part or other legal authority are necessary or appropriate for a particular national bank or Federal savings association, the OCC will notify the national bank or Federal savings association in writing of the proposed minimum capital ratios and the date by which they should be reached (if applicable) and will provide an explanation of why the ratios proposed are considered necessary or appropriate for the national bank or Federal savings association.
- (b) Response. (1) The national bank or Federal savings association may respond to any or all of the items in the notice. The response should include any matters which the national bank

- or Federal savings association would have the OCC consider in deciding whether individual minimum capital ratios should be established for the national bank or Federal savings association, what those capital ratios should be, and, if applicable, when they should be achieved. The response must be in writing and delivered to the designated OCC official within 30 days after the date on which the national bank or Federal savings association received the notice. The OCC may shorten the time period when, in the opinion of the OCC, the condition of the national bank or Federal savings association so requires, provided that the national bank or Federal savings association is informed promptly of the new time period, or with the consent of the national bank or Federal savings association. In its discretion, the OCC may extend the time period for good cause.
- (2) Failure to respond within 30 days or such other time period as may be specified by the OCC shall constitute a waiver of any objections to the proposed minimum capital ratios or the deadline for their achievement.
- (c) Decision. After the close of the national bank's or Federal savings association's response period, the OCC will decide, based on a review of the national bank's or Federal savings association's response and other information concerning the national bank or Federal savings association, whether individual minimum capital ratios should be established for the national bank or Federal savings association and, if so, the ratios and the date the requirements will become effective. The national bank or Federal savings association will be notified of the decision in writing. The notice will include an explanation of the decision, except for a decision not to establish individual minimum capital requirements for the national bank or Federal savings association.
- (d) Submission of plan. The decision may require the national bank or Federal savings association to develop and submit to the OCC, within a time period specified, an acceptable plan to reach the minimum capital ratios established for the national bank or Federal savings association by the date required.

§ 3.405

(e) Change in circumstances. If, after the OCC's decision in paragraph (c) of this section, there is a change in the circumstances affecting the national bank's or Federal savings association's capital adequacy or its ability to reach the required minimum capital ratios by the specified date, the national bank or Federal savings association may propose to the OCC, or the OCC may propose to the national bank or Federal savings association, a change in the minimum capital ratios for the national bank or Federal savings association, the date when the minimums must be achieved, or the national bank's or Federal savings association's plan (if applicable). The OCC may decline to consider proposals that are not based on a significant change in circumstances or are repetitive or frivolous. Pending a decision on reconsideration, the OCC's original decision and any plan required under that decision shall continue in full force and effect.

§ 3.405 Relation to other actions.

In lieu of, or in addition to, the procedures in this subpart, the required minimum capital ratios for a national bank or Federal savings association may be established or revised through a written agreement or cease and desist proceedings under 12 U.S.C. 1818 (b) or (c) (12 CFR 19.0 through 19.21 for national banks and 12 CFR part 109 for Federal savings associations) or as a condition for approval of an application.

Subpart I—Enforcement

SOURCE: 78 FR 62269, Oct. 11, 2013, unless otherwise noted.

§ 3.501 Remedies.

A national bank or Federal savings association that does not have or maintain the minimum capital ratios applicable to it, whether required in subpart B of this part, in a decision pursuant to subpart H of this part, in a written agreement or temporary or final order under 12 U.S.C. 1818 (b) or (c), or in a condition for approval of an application, or a national bank or Federal savings association that has failed to submit or comply with an acceptable plan to attain those ratios, will be subject

to such administrative action or sanctions as the OCC considers appropriate. These sanctions may include the issuance of a Directive pursuant to subpart J of this part or other enforcement action, assessment of civil money penalties, and/or the denial, conditioning, or revocation of applications. A national bank's or Federal savings association's failure to achieve or maintain minimum capital ratios in subpart B of this part may also be the basis for an action by the Federal Deposit Insurance Corporation

Subpart J—Issuance of a Directive

SOURCE: 78 FR 62269, Oct. 11, 2013, unless otherwise noted.

§ 3.601 Purpose and scope.

- (a) This subpart is applicable to proceedings by the OCC to issue a directive under 12 U.S.C. 3907(b)(2) or 12 U.S.C. 1464(s), as appropriate. A directive is an order issued to a national bank or Federal savings association that does not have or maintain capital at or above the minimum ratios set forth in subpart B of this part, or established for the national bank or Federal savings association under subpart H of this part, by a written agreement under 12 U.S.C. 1818(b), or as a condition for approval of an application. A directive may order the national bank or Federal savings association to:
- (1) Achieve the minimum capital ratios applicable to it by a specified date;
- (2) Adhere to a previously submitted plan to achieve the applicable capital ratios:
- (3) Submit and adhere to a plan acceptable to the OCC describing the means and time schedule by which the national bank or Federal savings association shall achieve the applicable capital ratios;
- (4) Take other action, such as reduction of assets or the rate of growth of assets, or restrictions on the payment of dividends, to achieve the applicable capital ratios; or
- (5) A combination of any of these or similar actions.
- (b) A directive issued under this rule, including a plan submitted under a directive, is enforceable in the same manner and to the same extent as an

effective and outstanding cease and desist order which has become final as defined in 12 U.S.C. 1818(k). Violation of a directive may result in assessment of civil money penalties in accordance with 12 U.S.C. 3909(d).

§ 3.602 Notice of intent to issue a directive.

The OCC will notify a national bank or Federal savings association in writing of its intention to issue a directive. The notice will state:

- (a) Reasons for issuance of the directive; and
- (b) The proposed contents of the directive.

§ 3.603 Response to notice.

- (a) A national bank or Federal savings association may respond to the notice by stating why a directive should not be issued and/or by proposing alternative contents for the directive. The response should include any matters which the national bank or Federal savings association would have the OCC consider in deciding whether to issue a directive and/or what the contents of the directive should be. The response may include a plan for achieving the minimum capital ratios applicable to the national bank or Federal savings association. The response must be in writing and delivered to the designated OCC official within 30 days after the date on which the national bank or Federal savings association received the notice. The OCC may shorten the 30-day time period:
- (1) When, in the opinion of the OCC, the condition of the national bank or Federal savings association so requires, provided that the national bank or Federal savings association shall be informed promptly of the new time period:
- (2) With the consent of the national bank or Federal savings association; or
- (3) When the national bank or Federal savings association already has advised the OCC that it cannot or will not achieve its applicable minimum capital ratios.
- (b) In its discretion, the OCC may extend the time period for good cause.
- (c) Failure to respond within 30 days or such other time period as may be

specified by the OCC shall constitute a waiver of any objections to the proposed directive.

§3.604 Decision.

After the closing date of the national bank's or Federal savings association's response period, or receipt of the national bank's or Federal savings association's response, if earlier, the OCC will consider the national bank's or Federal savings association's response, and may seek additional information or clarification of the response. Thereafter, the OCC will determine whether or not to issue a directive, and if one is to be issued, whether it should be as originally proposed or in modified form.

§ 3.605 Issuance of a directive.

- (a) A directive will be served by delivery to the national bank or Federal savings association. It will include or be accompanied by a statement of reasons for its issuance.
- (b) A directive is effective immediately upon its receipt by the national bank or Federal savings association, or upon such later date as may be specified therein, and shall remain effective and enforceable until it is stayed, modified, or terminated by the OCC.

§ 3.606 Change in circumstances.

Upon a change in circumstances, a national bank or Federal savings association may request the OCC to reconsider the terms of its directive or may propose changes in the plan to achieve the national bank's or Federal savings association's applicable minimum capital ratios. The OCC also may take such action on its own motion. The OCC may decline to consider requests or proposals that are not based on a significant change in circumstances or are repetitive or frivolous. Pending a decision on reconsideration, the directive and plan shall continue in full force and effect.

§ 3.607 Relation to other administrative actions.

A directive may be issued in addition to, or in lieu of, any other action authorized by law, including cease and desist proceedings, civil money penalties, or the conditioning or denial of

§ 3.701

applications. The OCC also may, in its discretion, take any action authorized by law, in lieu of a directive, in response to a national bank's or Federal savings association's failure to achieve or maintain the applicable minimum capital ratios.

Subpart K—Interpretations

SOURCE: 78 FR 62272, Oct. 11, 2013, unless otherwise noted.

§3.701 Capital and surplus.

For purposes of determining statutory limits that are based on the amount of a national bank's *capital* and/or *surplus*, the provisions of this section are to be used, rather than the definitions of capital contained in subparts A through J of this part.

- (a) Capital. The term capital as used in provisions of law relating to the capital of national banks shall include the amount of common stock outstanding and unimpaired plus the amount of perpetual preferred stock outstanding and unimpaired.
- (b) Capital Stock. The term capital stock as used in provisions of law relating to the capital stock of national banks, other than 12 U.S.C. 101, 177, and 178 shall have the same meaning as the term capital set forth in paragraph (a) of this section.
- (c) Surplus. The term surplus as used in provisions of law relating to the surplus of national banks means the sum of paragraphs (c)(1), (2), (3), and (4) of this section:
- (1) Capital surplus; undivided profits; reserves for contingencies and other capital reserves (excluding accrued dividends on perpetual and limited life preferred stock); net worth certificates issued pursuant to 12 U.S.C. 1823(i); minority interests in consolidated subsidiaries; and allowances for loan and lease losses; minus intangible assets;
 - (2) Mortgage servicing assets;
- (3) Mandatory convertible debt to the extent of 20 percent of the sum of paragraphs (a) and (c) (1) and (2) of this section:
- (4) Other mandatory convertible debt, limited life preferred stock and subordinated notes and debentures to the extent set forth in paragraph (f)(2) of this section.

- (d) Unimpaired surplus fund. The term unimpaired surplus fund as used in provisions of law relating to the unimpaired surplus fund of national banks shall have the same meaning as the term surplus set forth in paragraph (c) of this section.
- (e) Definitions. (1) Allowance for loan and lease losses means the balance of the valuation reserve on December 31, 1968, plus additions to the reserve charged to operations since that date, less losses charged against the allowance net of recoveries.
- (2) Capital surplus means the total of those accounts reflecting:
- (i) Amounts paid in in excess of the par or stated value of capital stock;
- (ii) Amounts contributed to the national bank other than for capital stock;
- (iii) Amounts transferred from undivided profits pursuant to 12 U.S.C. 60;
- (iv) Other amounts transferred from undivided profits.
- (3) Intangible assets means those purchased assets that are to be reported as intangible assets in accordance with the Instructions—Consolidated Reports of Condition and Income (Call Report).
- (4) Limited life preferred stock means preferred stock which has a maturity or which may be redeemed at the option of the holder.
- (5) Mandatory convertible debt means subordinated debt instruments which unqualifiedly require the issuer to exchange either common or perpetual preferred stock for such instruments by a date at or before the maturity of the instrument. The maturity of these instruments must be 12 years or less. In addition, the instrument must meet the requirements of paragraphs (f)(1)(i) through (v) of this section for subordinated notes and debentures or other requirements published by the OCC.
- (6) Minority interest in consolidated subsidiaries means the portion of equity capital accounts of all consolidated subsidiaries of the national bank that is allocated to minority shareholders of such subsidiaries.
- (7) Mortgage servicing assets means the national bank-owned rights to service for a fee mortgage loans that are owned by others.

- (8) Perpetual preferred stock means preferred stock that does not have a stated maturity date and cannot be redeemed at the option of the holder.
- (f) Requirements and restrictions: Limited life preferred stock, mandatory convertible debt, and other subordinated debt—(1) Requirements. Issues of limited life preferred stock and subordinated notes and debentures (except mandatory convertible debt) shall have original weighted average maturities of at least five years to be included in the definition of surplus. In addition, a subordinated note or debenture must also:
- (i) Be subordinated to the claims of depositors:
- (ii) State on the instrument that it is not a deposit and is not insured by the FDIC:
 - (iii) Be unsecured;
- (iv) Be ineligible as collateral for a loan by the issuing national bank;
- (v) Provide that once any scheduled payments of principal begin, all scheduled payments shall be made at least annually and the amount repaid in each year shall be no less than in the prior year; and
- (vi) Provide that no prepayment (including payment pursuant to an acceleration clause or redemption prior to maturity) shall be made without prior OCC approval unless the national bank remains an eligible bank, as defined in 12 CFR 5.3(g), after the prepayment.
- (2) Restrictions. The total amount of mandatory convertible debt not included in paragraph (c)(3) of this section, limited life preferred stock, and subordinated notes and debentures considered as surplus is limited to 50 percent of the sum of paragraphs (a) and (c) (1), (2) and (3) of this section.
- (3) Reservation of authority. The OCC expressly reserves the authority to waive the requirements and restrictions set forth in paragraphs (f)(1) and (2) of this section, in order to allow the inclusion of other limited life preferred stock, mandatory convertible notes and subordinated notes and debentures in the capital base of any national bank for capital adequacy purposes or for purposes of determining statutory limits. The OCC further expressly reserves the authority to impose more stringent conditions than those set forth in paragraphs (f)(1) and (2) of this

section to exclude any component of tier 1 or tier 2 capital, in whole or in part, as part of a national bank's capital and surplus for any purpose.

- (g) Transitional rules. (1) Equity commitment notes approved by the OCC as capital and issued prior to April 15, 1985, may continue to be included in paragraph (c)(3) of this section. All other instruments approved by the OCC as capital and issued prior to April 15, 1985, are to be included in paragraph (c)(4) of this section.
- (2) Intangible assets (other than mortgage servicing assets) purchased prior to April 15, 1985, and accounted for in accordance with OCC instructions, may continue to be included as surplus up to 25 percent of the sum of paragraphs (a) and (c)(1) of this section.

APPENDIX A TO PART 3—RISK-BASED CAPITAL GUIDELINES

Section 1. Purpose, Applicability of Guidelines, and Definitions.

- (a) Purpose. (1) An important function of the Office of the Comptroller of the Currency (OCC) is to evaluate the adequacy of capital maintained by each national bank. Such an evaluation involves the consideration of numerous factors, including the riskiness of a bank's assets and off-balance sheet items. This appendix A implements the OCC's riskbased capital guidelines. The risk-based capital ratio derived from those guidelines is more systematically sensitive to the credit risk associated with various bank activities than is a capital ratio based strictly on a bank's total balance sheet assets. A bank's risk-based capital ratio is obtained by dividing its capital base (as defined in section 2 of this appendix A) by its risk-weighted assets (as calculated pursuant to section 3 of this appendix A). These guidelines were created within the framework established by the report issued by the Committee on Banking Regulations and Supervisory Practices in July 1988. The OCC believes that the riskbased capital ratio is a useful tool in evaluating the capital adequacy of all national banks, not just those that are active in the international banking system.
- (2) The purpose of this appendix A is to explain precisely (i) how a national bank's risk-based capital ratio is determined and (ii) how these risk-based capital guidelines are applied to national banks. The OCC will review these guidelines periodically for possible adjustments commensurate with its experience with the risk-based capital ratio and with changes in the economy, financial markets and domestic and international banking practices.

- (b) Applicability (1) The risk-based capital ratio derived from these guidelines is an important factor in the OCC's evaluation of a bank's capital adequacy. However, since this measure addresses only credit risk, the 8% minimum ratio should not be viewed as the level to be targeted, but rather as a floor. The final supervisory judgment on a bank's capital adequacy is based on an individualized assessment of numerous factors, including those listed in 12 CFR 3.10. With respect to the consideration of these factors, the OCC will give particular attention to any bank with significant exposure to declines in the economic value of its capital due to changes in interest rates. As a result, it may differ from the conclusion drawn from an isolated comparison of a bank's risk-based capital ration to the 8% minimum specified in these guidelines. In addition to the standards established by these risk-based capital guidelines, all national banks must maintain a minimum capital-to-total assets ratio in accordance with the provisions of 12 CFR part 3.
- (2) Effective December 31, 1990, these risk-based capital guidelines will apply to all national banks. In the interim, banks must maintain minimum capital-to-total assets ratios as required by 12 CFR part 3, and should begin preparing for the implementation of these risk-based capital guidelines. In this regard, each national bank that does not currently meet the final minimum ratio established in section 4(b)(1) of this appendix A should begin planning for achieving that standard.
- (3) These risk-based capital guidelines will not be applied to federal branches and agencies of foreign banks.
- (c) *Definitions*. For purposes of this appendix A, the following definitions apply:
- (1) Adjusted carrying value means, for purposes of section 2(c)(5) of this appendix A, the aggregate value that investments are carried on the balance sheet of the bank reduced by any unrealized gains on the investments that are reflected in such carrying value but excluded from the bank's Tier 1 capital and reduced by any associated deferred tax liabilities. For example, for investments held as available-for-sale (AFS), the adjusted carrying value of the investments would be the aggregate carrying value of the investments (as reflected on the consolidated balance sheet of the bank) less any unrealized gains on those investments that are included in other comprehensive income and that are not reflected in Tier 1 capital. and less any associated deferred tax liabilities. Unrealized losses on AFS nonfinancial equity investments must be deducted from Tier 1 capital in accordance with section 1(c)(10) of this appendix A. The treatment of small business investment companies that are consolidated for accounting purposes under generally accepted accounting prin-

- ciples is discussed in section 2(c)(5)(ii) of this appendix A. For investments in a nonfinancial company that is consolidated for accounting purposes, the bank's adjusted carrying value of the investment is determined under the equity method of accounting (net of any intangibles associated with the investment that are deducted from the bank's Tier 1 capital in accordance with section 2(c)(2) of this appendix A). Even though the assets of the nonfinancial company are consolidated for accounting purposes, these assets (as well as the credit equivalent amounts of the company's off-balance sheet items) are excluded from the bank's riskweighted assets.
- (2) Allowances for loan and lease losses means the balance of the valuation reserve on December 31, 1968, plus additions to the reserve charged to operations since that date, less losses charged against the allowance net of recoveries.
- (3) Asset-backed commercial paper program means a program that primarily issues externally rated commercial paper backed by assets or other exposures held in a bank-ruptcy-remote, special-purpose entity.
- (4) Asset-backed commercial paper sponsor means a bank that:
- (i) Establishes an asset-backed commercial paper program;
- (ii) Approves the sellers permitted to participate in an asset-backed commercial paper program;
- (iii) Approves the asset pools to be purchased by an asset-backed commercial paper program; or
- (iv) Administers the asset-backed commercial paper program by monitoring the assets, arranging for debt placement, compiling monthly reports, or ensuring compliance with the program documents and with the program's credit and investment policy.
- (5) Associated company means any corporation, partnership, business trust, joint venture, association or similar organization in which a national bank directly or indirectly holds a 20 to 50 percent ownership interest.
- (6) Banking and finance subsidiary means any subsidiary of a national bank that engages in banking- and finance-related activities.
- (7) Cash items in the process of collection means checks or drafts in the process of collection that are drawn on another depository institution, including a central bank, and that are payable immediately upon presentation in the country in which the reporting bank's office that is clearing or collecting the check or draft is located; U.S. Government checks that are drawn on the United States Treasury or any other U.S. Government or Government-sponsored agency and that are payable immediately upon presentation; broker's security drafts and commodity or bill-of-lading drafts payable immediately upon presentation in the United

States or the country in which the reporting bank's office that is handling the drafts is located; and unposted debits.

- (8) Central government means the national governing authority of a country; it includes the departments, ministries and agencies of the central government and the central bank. The U.S. Central Bank includes the 12 Federal Reserve Banks. The definition of central government does not include the following: State, provincial, or local governments; commercial enterprises owned by the central government, which are entities engaged in activities involving trade, commerce, or profit that are generally conducted or performed in the private sector of the United States economy; and non-central government entities whose obligations are guaranteed by the central government.
- (9) Commitment means any arrangement that obligates a national bank to: (i) Purchase loans or securities; or (ii) extend credit in the form of loans or leases, participations in loans or leases, overdraft facilities, revolving credit facilities, home equity lines of credit, liquidity facilities, or similar transactions.
- (10) Common stockholders' equity means common stock, common stock surplus, undivided profits, capital reserves, and adjustments for the cumulative effect of foreign currency translation, less net unrealized holding losses on available-for-sale equity securities with readily determinable fair values
- (11) Conditional guarantee means a contingent obligation of the United States Government or its agencies, or the central government of an OECD country, the validity of which to the beneficiary is dependent upon some affirmative action—e.g., servicing requirements—on the part of the beneficiary of the guarantee or a third party.
- (12) Deferred tax assets means the tax consequences attributable to tax carryforwards and deductible temporary differences. Tax carryforwards are deductions or credits that cannot be used for tax purposes during the current period, but can be carried forward to reduce taxable income or taxes payable in a future period or periods. Temporary differences are financial events or transactions that are recognized in one period for financial statement purposes, but are recognized in another period or periods for income tax purposes. Deductible temporary differences are temporary differences that result in a reduction of taxable income in a future period or periods.
- (13) Derivative contract means generally a financial contract whose value is derived from the values of one or more underlying assets, reference rates or indexes of asset values. Derivative contracts include interest rate, foreign exchange rate, equity, precious metals and commodity contracts, or any

other instrument that poses similar credit risks.

- (14) Depository institution means a financial institution that engages in the business of banking; that is recognized as a bank by the bank supervisory or monetary authorities of the country of its incorporation and the country of its principal banking operations; that receives deposits to a substantial extent in the regular course of business; and that has the power to accept demand deposits. In the U.S., this definition encompasses all federally insured offices of commercial banks, mutual and stock savings banks, savings or building and loan associations (stock and mutual), cooperative banks, credit unions, and international banking facilities of domestic depository institution. Bank holding companies are excluded from this definition. For the purposes of assigning risk weights, the differentiation between OECD depository institutions and non-OECD depository institutions is based on the country of incorporation. Claims on branches and agencies of foreign banks located in the United States are to be categorized on the basis of the parent bank's country of incorporation.
- (15) Equity investment means, for purposes of section 1(c)(19) and section 2(c)(5) of this appendix A, any equity instrument including warrants and call options that give the holder the right to purchase an equity instrument, any equity feature of a debt instrument (such as a warrant or call option), and any debt instrument that is convertible into equity. An investment in any other instrument, including subordinated debt or other types of debt instruments, may be treated as an equity investment if the OCC determines that the instrument is the functional equivalent of equity or exposes the bank to essentially the same risks as an equity instrument.
- (16) Exchange rate contracts include: Crosscurrency interest rate swaps; forward foreign exchange rate contracts; currency options purchased; and any similar instrument that, in the opinion of the OCC, gives rise to similar risks
- (17) Goodwill is an intangible asset that represents the excess of the cost of an acquired entity over the net of the amounts assigned to assets acquired and liabilities assumed.
- (18) Intangible assets include mortgage and non-mortgage servicing assets (but exclude any interest only (IO) strips receivable related to these mortgage and nonmortgage servicing assets), purchased credit card relationships, goodwill, favorable leaseholds, and core deposit value.
- (19) Interest rate contracts include: Single currency interest rate swaps; basis swaps; forward rate agreements; interest rate options purchased; forward forward deposits accepted; and any similar instrument that, in

the opinion of the OCC, gives rise to similar risks, including when-issued securities.

(20) Liquidity facility means a legally binding commitment to provide liquidity to various types of transactions, structures or programs. A liquidity facility that supports asset-backed commercial paper, in any amount, by lending to, or purchasing assets from any structure, program, or conduit constitutes an asset-backed commercial paper liquidity facility.

(21) Multifamily residential property means any residential property consisting of five or more dwelling units including apartment buildings, condominiums, cooperatives, and other similar structures primarily for residential use, but not including hospitals, nursing homes, or other similar facilities.

(22) Nationally recognized statistical rating organization (NRSRO) means an entity recognized by the Division of Market Regulation of the Securities and Exchange Commission (or any successor Division) (Commission or SEC) as a nationally recognized statistical rating organization for various purposes, including the Commission's uniform net capuital requirements for brokers and dealers.

(23) Nonfinancial equity investment means any equity investment held by a bank in a nonfinancial company through a small business investment company (SBIC) under section 302(b) of the Small Business Investment Act of 1958 (15 U.S.C. 682(b)) or under the portfolio investment provisions of Regulation K (12 CFR 211.8(c)(3)). An equity investment made under section 302(b) of the Small Business Investment Act of 1958 in a SBIC that is not consolidated with the bank is treated as a nonfinancial equity investment in the manner provided in section 2(c)(5)(ii)(C) of this appendix A. A nonfinancial company is an entity that engages in any activity that has not been determined to be permissible for a bank to conduct directly or to be financial in nature or incidental to financial activities under section 4(k) of the Bank Holding Company Act (12 U.S.C. 1843(k)).

(24) The OECD-based group of countries comprises all full members of the Organization for Economic Cooperation and Development (OECD) regardless of entry date, as well as countries that have concluded special lending arrangements with the International Monetary Fund (IMF) associated with the IMF's General Arrangements to Borrow, ¹

but excludes any country that has rescheduled its external sovereign debt within the previous five years. These countries are hereinafter referred to as *OECD countries*. A rescheduling of external sovereign debt generally would include any renegotiation of terms arising from a country's inability or unwillingness to meet its external debt service obligations, but generally would not include renegotiations of debt in the normal course of business, such as a renegotiation to allow the borrower to take advantage of a decline in interest rates or other change in market conditions.

(25) Original maturity means, with respect to a commitment, the earliest possible date after a commitment is made on which the commitment is scheduled to expire (i.e., it will reach its stated maturity and cease to be binding on either party), provided that either:

(i) The commitment is not subject to extension or renewal and will actually expire on its stated expiration date; or

(ii) If the commitment is subject to extension or renewal beyond its stated expiration date, the stated expiration date will be deemed the original maturity only if the extension or renewal must be based upon terms and conditions independently negotiated in good faith with the customer at the time of the extension or renewal and upon a new, bona fide credit analysis utilizing current information on financial condition and trends.

(26) Preferred stock includes the following instruments: (i) Convertible preferred stock, which means preferred stock that is mandatorily convertible into either common or perpetual preferred stock; (ii) Intermediate-term preferred stock, which means preferred stock with an original maturity of at least five years, but less than 20 years; (iii) Long-term preferred stock, which means preferred stock with an original maturity of 20 years or more; and (iv) Perpetual preferred stock, which means preferred stock without a fixed maturity date that cannot be redeemed at the option of the holder, and that has no other provisions that will require future redemption of the issue. For purposes of these instruments, preferred stock that can be redeemed at the option of the holder is deemed to have an original maturity of the earliest possible date on which it may be so redeemed.

(27) Public-sector entities include states, local authorities and governmental subdivisions below the central government level in an OECD country. In the United States, this definition encompasses a state, county, city, town, or other municipal corporation, a public authority, and generally any publicly-owned entity that is an instrumentality of a

¹As of November 1995, the OECD included the following countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States; and Saudi Arabia had concluded special lending

arrangements with the IMF associated with the IMF's General Arrangements to Borrow.

state or municipal corporation. This definition does not include commercial companies owned by the public sector. 1a

(28) Reciprocal holdings of bank capital instruments means cross-holdings or other formal or informal arrangements in which two or more banking organizations swap, exchange, or otherwise agree to hold each other's capital instruments. This definition does not include holdings of capital instruments issued by other banking organizations that were taken in satisfaction of debts previously contracted, provided that the reporting national bank has not held such instruments for more than five years or a longer period approved by the OCC.

(29) Replacement cost means, with respect to interest rate and exchange rate contracts, the loss that would be incurred in the event of a counterparty default, as measured by the net cost of replacing the contract at the current market value. If default would result in a theoretical profit, the replacement value is considered to be zero. The mark-to-market process should incorporate changes in both interest rates and counterparty credit quality.

- (30) Residential properties means houses, condominiums, cooperative units, and manufactured homes. This definition does not include boats or motor homes, even if used as a primary residence.
- (31) Risk-weighted assets means the sum of total risk-weighted balance sheet assets and the total of risk-weighted off-balance sheet credit equivalent amounts. Risk-weighted balance sheet and off-balance sheet assets are calculated in accordance with section 3 of this appendix A.
- (32) State means any one of the several states of the United States of America, the District of Columbia, Puerto Rico, and the territories and possessions of the United States.
- (33) Subsidiary means any corporation, partnership, business trust, joint venture, association or similar organization in which a national bank directly or indirectly holds more than a 50% ownership interest. This definition does not include ownership interests that were taken in satisfaction of debts previously contracted, provided that the reporting bank has not held the interest for more than five years or a longer period approved by the OCC.
- (34) Total capital means the sum of a national bank's core (Tier 1) and qualifying supplementary (Tier 2) capital elements.
- (35) Unconditionally cancelable means, with respect to a commitment-type lending arrangement, that the bank may, at any time, with or without cause, refuse to advance

funds or extend credit under the facility. In the case of home equity lines of credit, the bank is deemed able to unconditionally cancel the commitment if it can, at its option, prohibit additional extensions of credit, reduce the line, and terminate the commitment to the full extent permitted by relevant Federal law.

- (36) United States Government or its agencies means an instrumentality of the U.S. Government whose debt obligations are fully and explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the United States Government.
- (37) United States Government-sponsored agency means an agency originally established or chartered to serve public purposes specified by the United States Congress, but whose obligations are not explicitly guaranteed by the full faith and credit of the United States Government.
- (38) Walkaway clause means a provision in a bilateral netting contract that permits a nondefaulting counterparty to make a lower payment than it would make otherwise under the bilateral netting contract, or no payment at all, to a defaulter or the estate of a defaulter, even if the defaulter or the estate of the defaulter is a net creditor under the bilateral netting contract.

Section 2. Components of Capital.

A national bank's qualifying capital base consists of two types of capital—core (Tier 1) and supplementary (Tier 2).

- (a) Tier 1 Capital. The following elements comprise a national bank's Tier 1 capital:
- (1) Common stockholders' equity;
- (2) Noncumulative perpetual preferred stock and related surplus; and $^{\rm 2}$
- (3) Minority interests in the equity accounts of consolidated subsidiaries, except that the following are not included in Tier 1 capital or total capital:
- (i) Minority interests in a small business investment company or investment fund that holds nonfinancial equity investments and minority interests in a subsidiary that is engaged in a nonfinancial activities and is held under one of the legal authorities listed in section 1(c)(23) of this appendix A.
 - (ii) [Reserved]
- (b) *Tier 2 Capital*. The following elements comprise a national bank's Tier 2 capital:

 $^{^{1}a}\mathit{See}$ Definition (5), Central government, for further explanation of commercial companies owned by the public sector.

²Preferred stock issues where the dividend is reset periodically based upon current market conditions and the bank's current credit rating, including but not limited to, auction rate, money market or remarketable preferred stock, are assigned to Tier 2 capital, regardless of whether the dividends are cumulative or noncumulative.

- (1) Allowance for loan and lease losses, up to a maximum of 1.25% of risk-weighted assets, 3 subject to the transition rules in section 4(a)(2) of this appendix A;
- (2) Cumulative perpetual preferred stock, long-term preferred stock, convertible preferred stock, and any related surplus, without limit, if the issuing national bank has the option to defer payment of dividends on these instruments. For long-term preferred stock, the amount that is eligible to be included as Tier 2 capital is reduced by 20% of the original amount of the instrument (net of redemptions) at the beginning of each of the last five years of the life of the instrument:
- (3) Hybrid capital instruments, without limit. Hybrid capital instruments are those instruments that combine certain characteristics of debt and equity, such as perpetual debt. To be included as Tier 2 capital, these instruments must meet the following criteria: 4
- (i) The instrument must be unsecured, subordinated to the claims of depositors and general creditors, and fully paid-up;
- (ii) The instrument must not be redeemable at the option of the holder prior to maturity, except with the prior approval of the
- (iii) The instrument must be available to participate in losses while the issuer is operating as a going concern (in this regard, the instrument must automatically convert to common stock or perpetual preferred stock, if the sum of the retained earnings and capital surplus accounts of the issuer shows a negative balance); and
- (iv) The instrument must provide the option for the issuer to defer principal and interest payments, if

⁴Mandatory convertible debt instruments that meet the requirements of 12 CFR 3.100(e)(5), or that have been previously approved as capital by the OCC, are treated as qualifying hybrid capital instruments.

- (A) The issuer does not report a net profit for the most recent combined four quarters, and
- (B) The issuer eliminates cash dividends on its common and preferred stock.
- (4) Term subordinated debt instruments, and intermediate-term preferred stock and related surplus are included in Tier 2 capital, but only to a maximum of 50% of Tier 1 capital as calculated after deductions pursuant to section 2(c) of this appendix. To be considered capital, term subordinated debt instruments shall meet the requirements of §3.100(f)(1). However, pursuant to 12 CFR 5.47, the OCC may, in some cases, require that the subordinated debt be approved by the OCC before the subordinated debt may qualify as Tier 2 capital or may require prior approval for any prepayment (including payment pursuant to an acceleration clause or redemption prior to maturity) of the subordinated debt. Also, at the beginning of each of the last five years for the life of either type of instrument, the amount that is eligible to be included as Tier 2 capital is reduced by 20% of the original amount of that instrument (net of redemptions).
- (5) Up to 45 percent of the pretax net unrealized holding gains (that is, the excess, if any, of the fair value over historical cost) on available-for-sale equity securities with readily determinable fair values. 5 Unrealized gains (losses) on other types of assets, such as bank premises and available-for-sale debt securities, are not included in Tier 2 capital, but the OCC may take these unrealized gains (losses) into account as additional factors when assessing a bank's overall capital adequacy.
- (c) Deductions from Capital. The following items are deducted from the appropriate portion of a national bank's capital base when calculating its risk-based capital ratio:
- (1) Deductions from Tier 1 Capital. The following items are deducted from Tier 1 capital before the Tier 2 portion of the calculation is made:
- (i) Goodwill;
- (ii) Other intangible assets, except as provided in section 2(c)(2) of this appendix A;
- (iii) Deferred tax assets, except as provided in section 2(c)(3) and (2)(c)(6) of this appendix A, that are dependent upon future taxable income, which exceed the lesser of either:
- (A) The amount of deferred tax assets that the bank could reasonably expect to realize within one year of the quarter-end Call Report, based on its estimate of future taxable income for that year; or

³The amount of the allowance for loan and lease losses that may be included in capital is based on a percentage of risk-weighted assets. The gross sum of risk-weighted assets used in this calculation includes all riskweighted assets, with the exception of the assets required to be deducted under section 3 in establishing risk-weighted assets (i.e., the assets required to be deducted from capital under section 2(c)) of this appendix. A banking organization may deduct reserves for loan and lease losses in excess of the amount permitted to be included as capital, as well as allocated transfer risk reserves and reserves held against other real estate owned, from the gross sum of risk-weighted assets in computing the denominator of the risk-based capital ratio

⁵The OCC reserves the authority to exclude all or a portion of unrealized gains from Tier 2 capital if the OCC determines that the equity securities are not prudently valued

- (B) 10% of Tier 1 capital, net of goodwill and all intangible assets other than purchased credit card relationships, mortgage servicing assets and non-mortgage servicing assets; and
- (iv) Credit-enhancing interest-only strips (as defined in section 4(a)(2) of this appendix A), as provided in section 2(c)(4).
- (v) Nonfinancial equity investments as provided by section 2(c)(5) of this appendix A.
- (2) Qualifying intangible assets. Subject to the following conditions, mortgage servicing assets, nonmortgage servicing assets ⁶ and purchased credit card relationships need not be deducted from Tier 1 capital:
- (i) The total of all intangible assets that are included in Tier 1 capital is limited to 100 percent of Tier 1 capital, of which no more than 25 percent of Tier 1 capital can consist of purchased credit card relationships and non-mortgage servicing assets in the aggregate. Calculation of these limitations must be based on Tier 1 capital net of goodwill and all other identifiable intangibles, other than purchased credit card relationships, mortgage servicing assets and non-mortgage servicing assets.
- (ii) Banks must value each intangible asset included in Tier 1 capital at least quarterly at the lesser of:
- (A) 90 percent of the fair value of each intangible asset, determined in accordance with section 2(c)(2)(iii) of this appendix A; or
- (B) 100 percent of the remaining unamortized book value.
- (iii) The quarterly determination of the current fair value of the intangible asset must include adjustments for any significant changes in original valuation assumptions, including changes in prepayment estimates.
- (3) Deferred tax assets—(1) Net unrealized gains and losses on available-for-sale securities. Net unrealized gains and losses on available-for-sale securities. Before calculating the amount of deferred tax assets subject to the limit in section 2(c)(1)(iii) of this appendix A, a bank may eliminate the deferred tax effects of any net unrealized holding gains and losses on available-for-sale debt securities. Banks report these net unrealized holding

⁶Intangible assets are defined to exclude IO strips receivable related to these mortgage and non-mortgage servicing assets. See section 1(c)(18) of this appendix A. Consequently, IO strips receivable related to mortgage and non-mortgage servicing assets are not required to be deducted under section 2(c)(2) of this appendix A. However, creditenhancing interest-only strips as defined in section 4(a)(2) are deducted from Tier 1 capital in accordance with section 2(c)(4) of this appendix A. Any non credit-enhancing IO strips receivable are subject to a 100% risk weight under section 3(a)(4) of this appendix A.

- gains and losses in their Call Reports as a separate component of equity capital, but exclude them from the definition of common stockholders' equity for regulatory capital purposes. A bank that adopts a policy to deduct these amounts must apply that approach consistently in all future calculations of the amount of disallowed deferred tax assets under section 2(c)(1)(iii) of this appendix A.
- (ii) Consolidated groups. The amount of deferred tax assets that a bank can realize from taxes paid in prior carryback years and from reversals of existing taxable temporary differences generally would not be deducted from capital. However, for a bank that is a member of a consolidated group (for tax purposes), the amount of carryback potential a bank may consider in calculating the limit on deferred tax assets under section 2(c)(1)(iii) of this appendix A, may not exceed the amount that the bank could reasonably expect to have refunded by its parent holding company.
- (iii) Estimated future taxable income. Estimated future taxable income does not include net operating loss carryforwards to be used during that year or the amount of existing temporary differences expected to reverse within the year. A bank may use future taxable income projections for their closest fiscal year, provided it adjusts the projections for any significant changes that occur or that it expects to occur. Such projections must include the estimated effect of tax planning strategies that the bank expects to implement to realize net operating losses or tax credit carryforwards that will otherwise expire during the year.
- (4) Credit-enhancing interest-only strips. Credit-enhancing interest-only strips, whether purchased or retained, that exceed 25% of Tier 1 capital must be deducted from Tier 1 capital. Purchased and retained credit-enhancing interest-only strips, on a non-tax adjusted basis, are included in the total amount that is used for purposes of determining whether a bank exceeds its Tier 1 capital.
- (i) The 25% limitation on credit-enhancing interest-only strips will be based on Tier 1 capital net of goodwill and all identifiable intangibles, other than purchased credit card relationships, mortgage servicing assets and non-mortgage servicing assets.
- (ii) Banks must value each credit-enhancing interest-only strip included in Tier 1 capital at least quarterly. The quarterly determination of the current fair value of the credit-enhancing interest-only strip must include adjustments for any significant changes in original valuation assumptions, including changes in prepayment estimates.
- (5) Nonfinancial equity investments—(i) General. (A) A bank must deduct from its Tier 1

capital the appropriate percentage, as determined in accordance with Table A, of the adjusted carrying value of all nonfinancial eq-

uity investments held by the bank and its subsidiaries.

TABLE A—DEDUCTION FOR NONFINANCIAL EQUITY INVESTMENTS

Aggregate adjusted carrying value of all nonfinancial equity investments held directly or indirectly by banks (as a percentage of the Tier 1 capital of the bank) ¹	Deduction from Tier 1 Capital (as a percentage of the ad- justed carrying value of the in- vestment)
Less than 15 percent Greater than or equal to 15 percent but less than 25 percent Greater than or equal to 25 percent	8.0 percent. 12.0 percent. 25.0 percent.

¹For purposes of calculating the adjusted carrying value of nonfinancial equity investments as a percentage of Tier 1 capital. Tier 1 capital is defined as the sum of the Tier 1 capital elements net of goodwill and net of all identifiable intangible assets other than mortgage servicing assets, nonmortgage servicing assets and purchased credit card relationships, but prior to the deduction for disallowed mortgage servicing assets, disallowed nonmortgage servicing assets, disallowed purchased credit card relationships, disallowed credit-enhancing interest only strips (both purchased and retained), disallowed deferred tax assets, and non-financial equity investments.

(B) Deductions for nonfinancial equity investments must be applied on a marginal basis to the portions of the adjusted carrying value of nonfinancial equity investments that fall within the specified ranges of the bank's Tier 1 capital. For example, if the adjusted carrying value of all nonfinancial equity investments held by a bank equals 20 percent of the Tier 1 capital of the bank, then the amount of the deduction would be 8 percent of the adjusted carrying value of all investments up to 15 percent of the bank's Tier 1 capital, and 12 percent of the adjusted carrying value of all investments equal to, or in excess of, 15 percent of the bank's Tier 1 capital

(C) The total adjusted carrying value of any nonfinancial equity investment that is subject to deduction under section 2(c)(5) of this appendix A is excluded from the bank's weighted risk assets for purposes of computing the denominator of the bank's risk-based capital ratio. For example, if 8 percent of the adjusted carrying value of a nonfinancial equity investment is deducted from Tier 1 capital, the entire adjusted carrying value of the investment will be excluded from risk-weighted assets in calculating the denominator of the risk-based capital ratio.

(D) Banks engaged in equity investment activities, including those banks with a high concentration in nonfinancial equity investments (e.g., in excess of 50 percent of Tier 1 capital), will be monitored and may be subject to heightened supervision, as appropriate, by the OCC to ensure that such banks maintain capital levels that are appropriate in light of their equity investment activities, and the OCC may impose a higher capital charge in any case where the circumstances, such as the level of risk of the particular investment or portfolio of investments, the risk management systems of the bank, or other information, indicate that a higher minimum capital requirement is appropriate.

(ii) Small business investment company in-(A) Notwithstanding section vestments. 2(c)(5)(i) of this appendix A, no deduction is required for nonfinancial equity investments that are made by a bank or its subsidiary through a SBIC that is consolidated with the bank, or in a SBIC that is not consolidated with the bank, to the extent that such investments, in the aggregate, do not exceed 15 percent of the Tier 1 capital of the bank. Except as provided in paragraph (c)(5)(ii)(B) of this section, any nonfinancial equity investment that is held through or in a SBIC and not deducted from Tier 1 capital will be assigned to the 100 percent risk-weight category and included in the bank's consolidated risk-weighted assets.

(B) If a bank has an investment in a SBIC that is consolidated for accounting purposes but the SBIC is not wholly owned by the bank, the adjusted carrying value of the bank's nonfinancial equity investments held through the SBIC is equal to the bank's proportionate share of the SBIC's adjusted carrying value of its equity investments in nonfinancial companies. The remainder of the SBIC's adjusted carrying value (i.e., the minority interest holders' proportionate share) is excluded from the risk-weighted assets of the bank.

(C) If a bank has an investment in a SBIC that is not consolidated for accounting purposes and has current information that identifies the percentage of the SBIC's assets that are equity investments in nonfinancial companies, the bank may reduce the adjusted carrying value of its investment in the SBIC proportionately to reflect the percentage of the adjusted carrying value of the SBIC's assets that are not equity investments in nonfinancial companies. The amount by which the adjusted carrying value of the bank's investment in the SBIC is reduced under this paragraph will be risk weighted at 100 percent and included in the bank's risk-weighted assets.

- (D) To the extent the adjusted carrying value of all nonfinancial equity investments that the bank holds through a consolidated SBIC or in a nonconsolidated SBIC equals or exceeds, in the aggregate, 15 percent of the Tier 1 capital of the bank, the appropriate percentage of such amounts, as set forth in Table A. must be deducted from the bank's Tier 1 capital. In addition, the aggregate adjusted carrying value of all nonfinancial equity investments held through a consolidated SBIC and in a nonconsolidated SBIC (including any nonfinancial equity investments for which no deduction is required) must be included in determining, for purposes of Table A the total amount of nonfinancial equity investments held by the bank in relation to its Tier 1 capital.
- (iii) Nonfinancial equity investments excluded. (A) Notwithstanding section 2(c)(5)(i) and (ii) of this appendix A, no deduction from Tier 1 capital is required for the following:
- (1) Nonfinancial equity investments (or portion of such investments) made by the bank prior to March 13, 2000, and continuously held by the bank since March 13, 2000.
- (2) Nonfinancial equity investments made on or after March 13, 2000, pursuant to a legally binding written commitment that was entered into by the bank prior to March 13, 2000, and that required the bank to make the investment, if the bank has continuously held the investment since the date the investment was acquired.
- (3) Nonfinancial equity investments received by the bank through a stock split or stock dividend on a nonfinancial equity investment made prior to March 13, 2000, provided that the bank provides no consideration for the shares or interests received, and the transaction does not materially increase the bank's proportional interest in the nonfinancial company.
- (4) Nonfinancial equity investments received by the bank through the exercise on or after March 13, 2000, of an option, warrant, or other agreement that provides the bank with the right, but not the obligation, to acquire equity or make an investment in a nonfinancial company, if the option, warrant, or other agreement was acquired by the bank prior to March 13, 2000, and the bank provides no consideration for the nonfinancial equity investments.
- (B) Any excluded nonfinancial equity investments described in section 2(c)(5)(iii)(A) of this appendix A must be included in determining the total amount of nonfinancial equity investments held by the bank in relation to its Tier 1 capital for purposes of Table A. In addition, any excluded nonfinancial equity investments will be risk weighted at 100 percent and included in the bank's risk-weighted assets.
- bank's risk-weighted assets.
 (6) Netting of Deferred Tax Liability. (i) Banks may elect to deduct the following as-

sets from Tier 1 capital on a basis that is net of any associated deferred tax liability:

- (A) Goodwill:
- (B) Intangible assets acquired due to a nontaxable purchase business combination, except banks may not elect to deduct from Tier 1 capital on a basis that is net of any associated deferred tax liability, regardless of the method by which they were acquired:
- (1) Purchased credit card relationships; and
- (2) Servicing assets that are includable in Tier 1 capital;
 - (C) Disallowed servicing assets;
- (D) Disallowed credit-enhancing interestonly strips; and
- (E) Nonfinancial equity investments, as defined in section 1(c)(1) of this appendix A.
- (ii) Deferred tax liabilities netted in this manner cannot also be netted against deferred tax assets when determining the amount of deferred tax assets that are dependent upon future taxable income as calculated under section 2(c)(1)(iii) of this appendix A.
- (7) Deductions from total capital. The following assets are deducted from total capital:
- (i) Investments, both equity and debt, in unconsolidated banking and finance subsidiaries that are deemed to be capital of the subsidiary; 7 and
- (ii) Reciprocal holdings of bank capital instruments

Section 3. Risk Categories/Weights for On-Balance Sheet Assets and Off-Balance Sheet Items

The denominator of the risk-based capital ratio, i.e., a national bank's risk-weighted assets,8 is derived by assigning that bank's assets and off-balance sheet items to one of the four risk categories detailed in section 3(a) of this appendix A. Each category has a specific risk weight. Before an off-balance sheet item is assigned a risk weight, it is converted to an on-balance sheet credit equivalent amount in accordance with section 3(b) of this appendix A. The risk weight assigned to a particular asset or on-balance sheet credit equivalent amount determines the percentage of that asset/credit equivalent that is included in the denominator of the bank's risk-based capital ratio. Any

⁷The OCC may require deduction of investments in other subsidiaries and associated companies, on a case-by-case basis.

⁸The OCC reserves the right to require a bank to compute its risk-based capital ratio on the basis of average, rather than periodend, risk-weighted assets when necessary to carry out the purposes of these guidelines.

asset deducted from a bank's capital in computing the numerator of the risk-based capital ratio is not included as part of the bank's risk-weighted assets.

Some of the assets on a bank's balance sheet may represent an indirect holding of a pool of assets, e.g., mutual funds, that encompasses more than one risk weight within the pool. In those situations, the bank may assign the asset to the risk category applicable to the highest risk-weighted asset that pool is permitted to hold pursuant to its stated investment objectives in the fund's prospectus. Alternatively, the bank may assign the asset on a pro rata basis to different risk categories according to the investment limits in the fund's prospectus. In either case, the minimum risk weight that may be assigned to such a pool is 20%. If a bank assigns the asset on a pro rata basis, and the sum of the investment limits in the fund's prospectus exceeds 100%, the bank must assign the highest pro rata amounts of its total investment to the higher risk category. If. in order to maintain a necessary degree of liquidity, the fund is permitted to hold an insignificant amount of its assets in shortterm, highly-liquid securities of superior credit quality (that do not qualify for a preferential risk weight), such securities generally will not be taken into account in determining the risk category into which the bank's holding in the overall pool should be assigned. The prudent use of hedging instruments by a fund to reduce the risk of its assets will not increase the risk weighting of the investment in that fund above the 20% category. However, if a fund engages in any activities that are deemed to be speculative in nature or has any other characteristics that are inconsistent with the preferential risk weighting assigned to the fund's assets, the bank's investment in the fund will be assigned to the 100% risk category. More detail on the treatment of mortgage-backed securities is provided in section 3(a)(3)(vi) of this appendix A.

- (a) On-Balance Sheet Assets. The following are the risk categories/weights for on-balance sheet assets.
- (1) Zero percent risk weight. (i) Cash, including domestic and foreign currency owned and held in all offices of a national bank or in transit. Any foreign currency held by a national bank should be converted into U.S. dollar equivalents.
- (ii) Deposit reserves and other balances at Federal Reserve Banks.
- (iii) Securities issued by, and other direct claims on, the United States Government or its agencies, or the central government of an OECD country.
- (iv) That portion of assets directly and unconditionally guaranteed by the United

States Government or its agencies, or the central government of an OECD country.⁹

- (v) That portion of local currency claims on, or unconditionally guaranteed by, central governments of non-OECD countries, to the extent the bank has liabilities in that currency. Any amount of such claims that exceeds the amount of the bank's liabilities in that currency is assigned to the 100% risk category of section 3(a)(4) of this appendix.
- (vi) Gold bullion held in the bank's own vaults or in another bank's vaults on an allocated basis, to the extent it is backed by gold bullion liabilities.
- (vii) The book value of paid-in Federal Reserve Bank stock.
- (viii) That portion of assets and off-balance sheet transactions ^{9a} collateralized by cash or securities issued or directly and unconditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country, provided that: ^{9b}
- (A) The bank maintains control over the collateral:
- (1) If the collateral consists of cash, the cash must be held on deposit by the bank or by a third-party for the account of the bank;
- (2) If the collateral consists of OECD government securities, then the OECD government securities must be held by the bank or by a third-party acting on behalf of the bank:
- (B) The bank maintains a daily positive margin of collateral fully taking into account any change in the market value of the collateral held as security;
- (C) Where the bank is acting as a customer's agent in a transaction involving the loan or sale of securities that is collateralized by cash or OECD government

⁹For the treatment of privately-issued mortgage-backed securities where the underlying pool is comprised solely of mortgage-related securities issued by GNMA, *see infra* note 10.

^{9a} See footnote 22 in section 3(b)(5)(iii) of this appendix A (collateral held against derivative contracts).

⁹b Assets and off-balance sheet transactions collateralized by securities issued or guaranteed by the United States Government or its agencies, or the central government of an OECD country include, but are not limited to, securities lending transactions, repurchase agreements, collateralized letters of credit, such as reinsurance letters of credit. and other similar financial guarantees. Swaps, forwards, futures, and options transactions are also eligible, if they meet the collateral requirements. However, the OCC may at its discretion require that certain collateralized transactions be risk weighted at 20 percent if they involve more than a minimal risk

securities delivered to the bank, any obligation by the bank to indemnify the customer is limited to no more than the difference between the market value of the securities lent and the market value of the collateral received, and any reinvestment risk associated with the collateral is borne by the customer; and

- (D) The transaction involves no more than minimal risk.
- (ix) Asset-backed commercial paper (ABCP) that is:
- (A) Purchased by the bank on or after September 19, 2008, from a Securities and Exchange Commission (SEC)-registered openend investment company that holds itself out as a money market mutual fund under SEC Rule 2a–7 (17 CFR 270.2a–7); and
- (B) Pledged by the bank to a Federal Reserve Bank to secure financing from the ABCP lending facility (AMLF) established by the Federal Reserve Board on September 19, 2008.
- (2) 20 percent risk weight. (i) All claims on depository institutions incorporated in an OECD country, and all assets backed by the full faith and credit of depository institutions incorporated in an OECD country. This includes the credit equivalent amount of participations in commitments and standby letters of credit sold to other depository institutions incorporated in an OECD country. but only if the originating bank remains liable to the customer or beneficiary for the full amount of the commitment or standby letter of credit. Also included in this category are the credit equivalent amounts of risk participations in bankers' acceptances conveyed to other depository institutions incorporated in an OECD country. However, bank-issued securities that qualify as capital of the issuing bank are not included in this risk category, but are assigned to the 100%risk category of section 3(a)(4) of this appendix A
- (ii) Claims on, or guaranteed by depository institutions, other than the central bank, incorporated in a non-OECD country, with a residual maturity of one year or less.
- (iii) Cash items in the process of collection
- (iv) That portion of assets collateralized by cash or by securities issued or directly and unconditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country, that does not qualify for the zero percent risk-weight category.
- (v) That portion of assets conditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country.
- (vi) Securities issued by, or other direct claims on, United States Government-sponsored agencies.

- (vii) That portion of assets guaranteed by United States Government-sponsored agencies. 10
- (viii) That portion of assets collateralized by the current market value of securities issued or guaranteed by United States Government-sponsored agencies.
- (ix) Claims representing general obligations of any public-sector entity in an OECD country, and that portion of any claims guaranteed by any such public-sector entity. In the U.S., these obligations must meet the requirements of 12 CFR 1.2(b).
- (x) Claims on, or guaranteed by, official multilateral lending institutions or regional development institutions in which the United States Government is a shareholder or contributing member. 11
- (xi) That portion of assets collateralized by the current market value of securities issued by official multilateral lending institutions or regional development institutions in which the United States Government is a shareholder or contributing member.
- (xii) That portion of local currency claims conditionally guaranteed by central governments of non-OECD countries, to the extent the bank has local currency liabilities in

10 Privately issued mortgage-backed securities, e.g., CMOs and REMICs, where the underlying pool is comprised solely of mortgage-related securities issued by GNMA, FNMA and FHLMC, will be treated as an indirect holding of the underlying assets and assigned to the 20% risk category of this section 3(a)(2). If the underlying pool is comprised of assets which attract different risk weights, e.g., FNMA securities and conventional mortgages, the bank should generally assign the security to the highest risk category appropriate for any asset in the pool. However, on a case-by-case basis, the OCC may allow the bank to assign the security proportionately to the various risk categories based on the proportion in which the risk categories are represented by the composition cash flows of the underlying pool of assets. Before the OCC will consider a request to proportionately risk-weight such a security, the bank must have current information for the reporting date that details the composition and cash flows of the underlying pool of assets. Furthermore, before a mortgage-related security will receive a risk weight lower than 100%, it must meet the criteria set forth in section 3(a)(3)(vi) of this appendix A.

These institutions include, but are not limited to, the International Bank for Reconstruction and Development (World Bank), the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Investments Bank, the International Monetary Fund and the Bank for International Settlements

that country. Any amount of such claims that exceeds the amount of the bank's local currency liabilities is assigned to the 100% risk category of section 3(a)(4) of this appendix.

(xiii) Claims on, or guaranteed by, a securities firm incorporated in an OECD country, that satisfies the following conditions:

(A) If the securities firm is incorporated in the United States, then the firm must be a broker-dealer that is registered with the SEC and must be in compliance with the SEC's net capital regulation (17 CFR 240.15c3(1)).

(B) If the securities firm is incorporated in any other OECD country, then the bank must be able to demonstrate that the firm is subject to consolidated supervision and regulation, including its subsidiaries, comparable to that imposed on depository institutions in OECD countries; such regulation must include risk-based capital standards comparable to those applied to depository institutions under the Basel Capital Accord. 11a

(C) The securities firm, whether incorporated in the United States or another OECD country, must also have a long-term credit rating in accordance with section 3(a)(2)(xiii)(C)(I) of this appendix A; a parent company guarantee in accordance with section 3(a)(2)(xiii)(C)(2) of this appendix A; or a collateralized claim in accordance with section 3(a)(2)(xiii)(C)(3) of this appendix A. Claims representing capital of a securities firm must be risk weighted at 100 percent in accordance with section 3(a)(4) of this appendix A.

(1) Credit rating. The securities firm must have either a long-term issuer credit rating or a credit rating on at least one issue of long-term unsecured debt, from a NRSRO that is in one of the three highest investment-grade categories used by the NRSRO. If the securities firm has a credit rating from more than one NRSRO, the lowest credit rating must be used to determine the credit rating under this paragraph.

(2) Parent company guarantee. The claim on, or guaranteed by, the securities firm must be guaranteed by the firm's parent company, and the parent company must have either a long-term issuer credit rating or a credit rating on at least one issue of long-term unsecured debt, from a NRSRO that is in one of the three highest investment-grade categories used by the NRSRO.

(3) Collateralized claim. The claim on the securities firm must be collateralized subject to all of the following requirements:

- (i) The claim must arise from a reverse repurchase/repurchase agreement or securities lending/borrowing contract executed using standard industry documentation.
- (ii) The collateral must consist of debt or equity securities that are liquid and readily marketable.
- (iii) The claim and collateral must be marked-to-market daily.
- (iv) The claim must be subject to daily margin maintenance requirements under standard industry documentation.
- (v) The contract from which the claim arises can be liquidated, terminated, or accelerated immediately in bankruptcy or similar proceedings, and the security or collateral agreement will not be stayed or avoided under the applicable law of the relevant jurisdiction. To be exempt from the automatic stay in bankruptcy in the United States, the claim must arise from a securities contract or a repurchase agreement under section 555 or 559, respectively, of the Bankruptcy Code (11 U.S.C. 555 or 559), a qualified financial contract under section 11(e)(8) of the Federal Deposit Insurance Act (12 U.S.C. 1821(e)(8)), or a netting contract between or among financial institutions under sections 401-407 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (912 U.S.C. 4407), or the Regulation EE (12 CFR part 231).
- (3) 50 percent risk weight. (i) Revenue obligations of any public-sector entity in an OECD country for which the underlying obligor is the public-sector entity, but which are repayable solely from the revenues generated by the project financed through the issuance of the obligations.
- (ii) The credit equivalent amount of derivative contracts, calculated in accordance with section 3(b)(5) of this appendix A, that do not qualify for inclusion in a lower risk category.
- (iii) Loans secured by first mortgages on one-to-four family residential properties, either owner occupied or rented, provided that such loans are not otherwise 90 days or more past due, or on nonaccrual or restructured. It is presumed that such loans will meet the prudent underwriting standards. For the purposes of the risk-based capital guidelines, a loan modified on a permanent or trial basis solely pursuant to the U.S. Department of Treasury's Home Affordable Mortgage Program will not be considered to have been restructured. If a bank holds a first lien and junior lien on a one-to-four family residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for the purposes of both determining the loan-tovalue ratio and assigning a risk weight to the transaction. Furthermore, residential property loans made for the purpose of construction financing are assigned to the 100%

^{11a} See Accord on International Convergence of Capital Measurement and Capital Standards as adopted by the Basle Committee on Banking Regulations and Supervisory Practices (renamed as the Basel Committee on Banking Supervision), dated July 1988 (amended 1998)

risk category of section 3(a)(4) of this appendix A; however, these loans may be included in the 50% risk category of this section 3(a)(3) of this appendix A if they are subject to a legally binding sales contract and satisfy the requirements of section 3(a)(3)(iv) of this appendix A.

- (iv) Loans to residential real estate builders for one-to-four family residential property construction, if the bank obtains sufficient documentation demonstrating that the buver of the home intends to purchase the home (i.e., a legally binding written sales contract) and has the ability to obtain a mortgage loan sufficient to purchase the home (i.e., a firm written commitment for permanent financing of the home upon completion), subject to the following additional criteria:
- (A) The builder must incur at least the first 10% of the direct costs (i.e., actual costs of the land, labor, and material) before any drawdown is made under the construction loan and the construction loan may not exceed 80% of the sales price of the resold home:
- (B) The individual purchaser has made a substantial "earnest money deposit" of no less than 3% of the sales price of the home that must be subject to forfeiture by the individual purchaser if the sales contract is terminated by the individual purchaser; however, the earnest money deposit shall not be subject to forfeiture by reason of breach or termination of the sales contract on the part of the builder:
- (C) The earnest money deposit must be held in escrow by the bank financing the builder or by an independent party in a fiduciary capacity; the escrow agreement must provide that in the event of default the escrow funds must be used to defray any cost incurred relating to any cancellation of the sales contract by the buyer;
- (D) If the individual purchaser terminates the contract or if the loan fails to satisfy any other criterion under this section, then the bank must immediately recategorize the loan at a 100% risk weight and must accurately report the loan in the bank's next quarterly Consolidated Reports of Condition and Income (Call Report);
- (E) The individual purchaser must intend that the home will be owner-occupied:
- (F) The loan is made by the bank in accordance with prudent underwriting stand-
- (G) The loan is not more than 90 days past due, or on nonaccrual; and
- (H) The purchaser is an individual(s) and not a partnership, joint venture, trust, corporation, or any other entity (including an entity acting as a sole proprietorship) that is purchasing one or more of the homes for speculative purposes.

- (v) Loans secured by a first mortgage on multifamily residential properties: 11b
- (A) The amortization of principal and interest occurs in not more than 30 years;
- (B) The minimum original maturity for repayment of principal is not less than 7 years:
- (C) All principal and interest payments have been made on a timely basis in accordance with the terms of the loan for at least one year immediately preceding the risk weighting of the loan in the 50% risk weight category, and the loan is not otherwise 90 days or more past due, or on nonaccrual sta-
- (D) The loan is made in accordance with all applicable requirements and prudent underwriting standards;
- (E) If the rate of interest does not change over the term of the loan:
- (I) The current loan amount outstanding does not exceed 80% of the current value of the property, as measured by either the value of the property at origination of the loan (which is the lower of the purchase price or the value as determined by the initial appraisal, or if appropriate, the initial evaluation) or the most current appraisal, or if appropriate, the most current evaluation;
- (II) In the most recent fiscal year, the ratio of annual net operating income generated by the property (before payment of any debt service on the loan) to annual debt service on the loan is not less than 120%:11c

Continued

 $^{^{11\}mathrm{b}}\mathrm{The}$ portion of multifamily residential property loans that is sold subject to a pro rata loss sharing arrangement may be treated by the selling bank as sold to the extent that the sales agreement provides for the purchaser of the loan to share in any loss incurred on the loan on a pro rata basis with the selling bank. The portion of multifamily residential property loans sold subject to any loss sharing arrangement other than pro rata sharing of the loss shall be accorded the same treatment as any other asset sold under an agreement to repurchase or sold with recourse under section 4(b) of this ap-

^{11c} For the purposes of the debt service requirements in sections 3(a)(3)(v)(E)(II) and 3(a)(3)(v)(F)(II) of this appendix A, other forms of debt service coverage that generate sufficient cash flows to provide comparable protection to the institution may be considered for (a) a loan secured by cooperative housing or (b) a multifamily residential property loan if the purpose of the loan is for the development or purchase of multifamily residential property primarily intended to provide low- to moderate-income housing. including special operating reserve accounts or special operating subsidies provided by

- (F) If the rate of interest changes over the term of the loan:
- (I) The current loan amount outstanding does not exceed 75% of the current value of the property, as measured by either the value of the property at origination of the loan (which is the lower of the purchase price or the value as determined by the initial appraisal, or if appropriate, the initial evaluation) or the most current appraisal, or if appropriate, the most current evaluation; and
- (II) In the most recent fiscal year, the ratio of annual net operating income generated by the property (before payment of any debt service on the loan) to annual debt service on the loan is not less than 115%; and
- (G) If the loan was refinanced by the borrower:
- (I) All principal and interest payments on the loan being refinanced which were made in the preceding year prior to refinancing shall apply in determining the one-year timely payment requirement under paragraph (a)(3)(v)(C) of this section; and
- (II) The net operating income generated by the property in the preceding year prior to refinancing shall apply in determining the applicable debt service requirements under paragraphs (a)(3)(v)(E) and (a)(3)(v)(F) of this section.
- (vi) Privately-issued mortgage-backed securities, *i.e.* those that do not carry the guarantee of a government or government-sponsored agency, if the privately-issued mortgage-backed securities are at the time the mortgage-backed securities are originated fully secured by or otherwise represent a sufficiently secure interest in mortgages that qualify for the 50% risk weight under paragraphs (a)(3) (iii), (iv) and (v) of this section, ¹² provided that they meet the following criteria:

federal, state, local or private sources. However, the OCC reserves the right, on a caseby-case basis, to review the adequacy of any other forms of comparable debt service coverage relied on by the bank.

12 If all of the underlying mortgages in the pool do not qualify for the 50% risk weight, the bank should generally assign the entire value of the security to the 100% risk category of section 3(a)(4) of this appendix A; however, on a case-by-case basis, the OCC may allow the bank to assign only the portion of the security which represents an interest in, and the cash flows of, nonqualifying mortgages to the 100% risk category, with the remainder being assigned a risk weight of 50%. Before the OCC will consider a request to risk weight a mortgage-backed security on a proportionate basis, the bank must have current information for the reporting date that details the composition

- (A) The underlying assets must be held by an independent trustee that has a first priority, perfected security interest in the underlying assets for the benefit of the holders of the security:
- (B) The holder of the security must have an undivided pro rata ownership interest in the underlying assets or the trust that issues the security must have no liabilities unrelated to the issued securities:
- (C) The trust that issues the security must be structured such that the cash flows from the underlying assets fully meet the cash flows requirements of the security without undue reliance on any reinvestment income; and
- (D) There must not be any material reinvestment risk associated with any funds awaiting distribution to the holder of the security.
- (4) 100 percent risk weight. All other assets not specified above, ^{12a} including:
- (i) Claims on or guaranteed by depository institutions incorporated in a non-OECD country, as well as claims on the central bank of a non-OECD country, with a residual maturity exceeding one year.
- (ii) All non-local currency claims on non-OECD central governments, as well as local currency claims on non-OECD central governments that are not included in section 3(a)(1)(v) of this appendix A.
- (iii) Asset-or mortgage backed securities that are externally rated are risk weighted in accordance with section 4(d) of this appendix A.
- (iv) All stripped mortgage-backed securities, including interest only portions (IOs), principal only portions (POs) and other similar instruments, regardless of the issuer or guarantor.
- (v) Obligations issued by any state or any political subdivision thereof for the benefit of a private party or enterprise where that party or enterprise, rather than the issuing state or political subdivision, is responsible for the timely payment of principal and interest on the obligation, *e.g.*, industrial development bonds.
- (vi) Claims on commercial enterprises owned by non-OECD and OECD central governments.
- (vii) Any investment in an unconsolidated subsidiary that is not required to be deducted from total capital pursuant to section 2(c)(3) of this appendix A.
- (viii) Instruments issued by depository institutions incorporated in OECD and non-

and cash flows of the underlying pool of mortgages.

^{12a} A bank subject to the market risk capital requirements pursuant to appendix B of this part 3 may calculate the capital requirement for qualifying securities borrowing transactions pursuant to section 3(a)(1)(ii) of appendix B of this part 3.

OECD countries that qualify as capital of the issuer.

- (ix) Investments in fixed assets, premises, and other real estate owned.
- (x) Claims representing capital of a securities firm notwithstanding section 3(a)(2)(xiii) of this appendix A. [Reserved]
- (xi) Subject to the requirements below, a bank may assign an asset not included in the categories above to the risk weight category applicable under the capital guidelines for bank holding companies (see 12 CFR part 225, appendix A), provided that all of the following conditions apply:
- (A) The bank is not authorized to hold the asset under applicable law other than debt previously contracted or similar authority; and
- (B) The risks associated with the asset are substantially similar to the risks of assets that are otherwise assigned to a risk weight category less than 100 percent under this appendix.
- (6) Other variable interest entities subject to consolidation. If a bank is required to consolidate the assets of a variable interest entity under generally accepted accounting principles, the bank must assess a risk-based capital charge based on the appropriate risk weight of the consolidated assets in accordance with sections 3(a) and 4 of this appendix A. Any direct credit substitutes and recourse obligations (including residual interests), and loans that a bank may provide to such a variable interest entity are not subject to a capital charge under section 4 of this appendix A.
- (b) Off-Balance Sheet Activities. The risk weight assigned to an off-balance sheet item is determined by a two-step process. First, the face amount of the off-balance sheet item is multiplied by the appropriate credit conversion factor specified in this section. This calculation translates the face amount of an off-balance sheet item into an on-balance sheet credit equivalent amount. Second, the resulting credit equivalent amount is then assigned to the proper risk category using the criteria regarding obligors, guarantors, and collateral listed in section 3(a) of this appendix A, or external credit rating in accordance with section 4(d), if applicable. Collateral and guarantees are applied to the face amount of an off-balance sheet item; however, with respect to derivative contracts under section 3(b)(5) of this appendix A, collateral and guarantees are applied to the credit equivalent amounts of such derivative contracts. The following are the credit conversion factors and the off-balance sheet items to which they apply. However, direct credit substitutes, recourse obligations, and securities issued in connection with asset securitizations are treated as described in section 4 of this appendix A.

- (1) 100 percent credit conversion factor. (i) $[Reserved]^{13}$
- (ii) Risk participations purchased in bankers' acceptances:
 - (iii) [Reserved] 14
- (iv) Contingent obligations with a certain draw down, e.g., legally binding agreements to purchase assets as a specified future date.
- (v) Indemnification of customers whose securities the bank has lent as agent. If the customer is not indemnified against loss by the bank, the transaction is excluded from the risk-based capital calculation. ¹⁵
- (2) 50 percent credit conversion factor. (i) Transaction-related contingencies including, among other things, performance bonds and performance-based standby letters of credit related to a particular transaction. ¹⁶ To the extent permitted by law or regulation, performance-based standby letters of credit include such things as arrangements backing subcontractors' and suppliers' performance, labor and materials contracts, and construction bids:
- (ii) Unused portion of commitments with an original maturity exceeding one-year; ¹⁷ however, commitments that are asset-backed commercial paper liquidity facilities must satisfy the eligibility requirements under section 3(b)(6)(ii) of this appendix A;
- (iii) Revolving underwriting facilities, note issuance facilities, and similar arrangements pursuant to which the bank's customer can issue short-term debt obligations in its own name, but for which the bank has a legally binding commitment to either:
- (A) Purchase the obligations the customer is unable to sell by a stated date; or
- (B) Advance funds to its customer, if the obligations cannot be sold.

- ¹⁶ For purposes of this section 3(b)(2)(i), a "performance-based standby letter of credit" is any letter of credit, or similar arrangement, however named or described, which represents an irrevocable obligation to the beneficiary on the part of the issuer to make payment on account of any default by the account party in the performance of a non-financial or commercial obligation. Participations in performance-based standby letters of credit are treated in accordance with section 4 of this appendix A.
- 17 Participations in commitments are treated in accordance with section 4 of this appendix A.

^{13 [}Reserved]

^{14 [}Reserved]

¹⁵When a bank lends its own securities, the transaction is treated as a loan. When a bank lends its own securities or, acting as agent, agrees to indemnify a customer, the transaction is assigned to the risk weight appropriate to the obligor or collateral that is delivered to the lending or indemnifying institution or to an independent custodian acting on their behalf.

- (3) 20 percent credit conversion factor. (i) Trade-related contingencies. These are short-term self-liquidating instruments used to finance the movement of goods and are collateralized by the underlying shipment. A commercial letter of credit is an example of such an instrument.
- (4) 10 percent credit conversion factor. Unused portion of asset-backed commercial paper liquidity facilities with an original maturity of one year or less that satisfy the eligibility requirements under section 3(b)(6)(ii) of this appendix A.
- (5) Zero percent credit conversion factor. (i) Unused portion of commitments with an original maturity of one year or less, but excluding any asset-backed commercial paper liquidity facilities;
- (ii) Unused portion of commitments with an original maturity of greater than one year, if they are unconditionally cancelable ¹⁸ at any time at the option of the bank and the bank has the contractual right to make, and in fact does make, either—
- (A) A separate credit decision based upon the borrower's current financial condition, before each drawing under the lending facility; or
- (B) An annual (or more frequent) credit review based upon the borrower's current financial condition to determine whether or not the lending facility should be continued; and
- (iii) The unused portion of retail credit card lines or other related plans that are unconditionally cancelable by the bank in accordance with applicable law.
- (6) Liquidity facility provided to asset-backed commercial paper. (i) Noneligible asset-backed commercial paper liquidity facilities treated as recourse or direct credit substitute. Unused portion of asset-backed commercial paper liquidity facilities that do not meet the criteria for an eligible liquidity facility provided to asset-backed commercial paper in accordance with section 3(b)(6)(ii) of this appendix A must be treated as recourse or as a direct credit substitute, and assessed the appropriate risk-based capital charge in accordance with section 4 of this appendix A.
- (ii) Eligible asset-backed commercial paper liquidity facility. Except as provided in section 3(b)(6)(iii) of this appendix A, in order for the unused portion of an asset-backed commercial paper liquidity facility to be eligible for either the 50 percent or 10 percent credit conversion factors under section 3(b)(2)(ii) or 3(b)(4) of this appendix A, the asset-backed commercial paper liquidity facility must satisfy the following criteria:
- (A) At the time of draw, the asset-backed commercial paper liquidity facility must be subject to an asset quality test that:
- $^{18}\,\mathrm{See}$ section 1(c)(26) of appendix A to this part.

- (1) Precludes funding of assets that are 90 days or more past due or in default; and
- (2) If the assets that an asset-backed commercial paper liquidity facility is required to fund are externally rated securities at the time they are transferred into the program, the asset-backed commercial paper liquidity facility must be used to fund only securities that are externally rated investment grade at the time of funding. If the assets are not externally rated at the time they are transferred into the program, then they are not subject to this investment grade requirement.
- (B) The asset-backed commercial paper liquidity facility must provide that, prior to any draws, the bank's funding obligation is reduced to cover only those assets that satisfy the funding criteria under the asset quality test as provided in section 3(b)(6)(ii)(A) of this appendix A.
- (iii) Exception to eligibility requirements for assets guaranteed by the United States Government or its agencies, or the central government of an OECD country. Notwithstanding the eligibility requirements for asset-backed commercial paper program liquidity facilities in section 3(b)(6)(ii), the unused portion of an asset-backed commercial paper liquidity facility may still qualify for either the 50 percent or 10 percent credit conversion factors under section 3(b)(2)(ii) or 3(b)(4) of this appendix A, if the assets required to be funded by the asset-back commercial paper liquidity facility are guaranteed, either conditionally or unconditionally, by the United States Government or its agencies, or the central government of an OECD country.
- (iv) Transition period for asset-backed commercial paper liquidity facilities. Notwithstanding the eligibility requirements for asset-backed commercial paper program liquidity facilities in section 3(b)(6)(i) of this appendix A, the unused portion of an assetbacked commercial paper liquidity will be treated as eligible liquidity facilities pursuant to section 3(b)(6)(ii) of this appendix A regardless of their compliance with the definition of eligible liquidity facilities until September 30, 2005. On that date and thereafter, the unused portions of asset-backed commercial paper liquidity facilities that do not meet the eligibility requirements in section 3(b)(6)(i) of this appendix A will be treated as recourse obligations or direct credit substitutes.
- (7) Derivative contracts—(i) Calculation of credit equivalent amounts. The credit equivalent amount of a derivative contract equals the sum of the current credit exposure and the potential future credit exposure of the derivative contract. The calculation of credit equivalent amounts must be measured in U.S. dollars, regardless of the currency or currencies specified in the derivative contract.

(A) Current credit exposure. The current credit exposure for a single derivative contract is determined by the mark-to-market value of the derivative contract. If the markto-market value is positive, then the current credit exposure equals that mark-to-market value. If the mark-to-market is zero or negative, then the current credit exposure is zero. The current credit exposure for multiple derivative contracts executed with a single counterparty and subject to a qualifying bilateral netting contract is determined as provided by section 3(b)(5)(ii)(A) of this appendix A

(B) Potential future credit exposure. The potential future credit exposure for a single derivative contract, including a derivative contract with negative mark-to-market value, is calculated by multiplying the notional principal 19 of the derivative contract by one of the credit conversion factors in Table A-

Conversion Factor Matrix of this appendix A. for the appropriate category. 20 The potential future credit exposure for gold contracts shall be calculated using the foreign exchange rate conversion factors. For any derivative contract that does not fall within one of the specified categories in Table A-Conversion Factor Matrix of this appendix A, the potential future credit exposure shall be calculated using the other commodity conversion factors. Subject to examiner review, banks should use the effective rather than the apparent or stated notional amount in calculating the potential future credit exposure. The potential future credit exposure for multiple derivatives contracts executed with a single counterparty and subject to a qualifying bilateral netting contract is determined as provided by section 3(b)(5)(ii)(A) of this appendix A.

TABLE B-CONVERSION FACTOR MATRIX 1

Remaining maturity ²	Interest rate	Foreign ex- change rate and gold	Equity ²	Precious metals	Other com- modity
One year or less	0.0	1.0	6.0	7.0	10.0
	0.5	5.0	8.0	7.0	12.0
	1.5	7.5	10.0	8.0	15.0

¹ For derivative contracts with multiple exchanges of principal, the conversion factors are multiplied by the number of remaining

(ii) Derivative contracts subject to a qualifying bilateral netting contract—(A) Netting calculation. The credit equivalent amount for multiple derivative contracts executed with a single counterparty and subject to a qualifying bilateral netting contract as provided by section (3)(b)(5)(ii)(B) of this appendix A is calculated by adding the net current credit exposure and the adjusted sum of the potential future credit exposure for all derivative contracts subject to the qualifying bilateral netting contract.

(1) Net current credit exposure. The net current credit exposure is the net sum of all positive and negative mark-to-market values of the individual derivative contracts subject to a qualifying bilateral netting contract. If the net sum of the mark-to-market value is positive, then the net current credit exposure equals that net sum of the mark-tomarket value. If the net sum of the mark-tomarket value is zero or negative, then the net current credit exposure is zero.

(2) Adjusted sum of the potential future credit exposure. The adjusted sum of the potential future credit exposure is calculated as:

$A_{net}=0.4\times A_{gross}+(0.6\times NGR\times A_{gross})$

Anet is the adjusted sum of the potential future credit exposure, Agross is the gross potential future credit exposure, and NGR is the net to gross ratio. A_{gross} is the sum of the potential future credit exposure (as determined under section 3(b)(5)(i)(B) of this appendix A) for each individual derivative contract subject to the qualifying bilateral netting contract. The NGR is the ratio of the net current credit exposure to the gross current credit exposure. In calculating the NGR, the gross current credit exposure equals the sum

payments in the derivative contract.

For derivative contracts with manipulation of payments in the derivative contracts that automatically reset to zero value following a payment, the remaining maturity equals the time until the next payment. However, interest rate contracts with remaining maturities of greater than one year shall be subject to a minimum conversion factor of 0.5 percent.

¹⁹ For purposes of calculating either the potential future credit exposure under section 3(b)(5)(i)(B) of this appendix A or the gross potential future credit exposure under section 3(b)(5)(ii)(A)(2) of this appendix A for foreign exchange contracts and other similar contracts in which the notional principal is equivalent to the cash flows, total notional principal is the net receipts to each party

falling due on each value date in each cur-

²⁰ No potential future credit exposure is calculated for single currency interest rate swaps in which payments are made based upon two floating indices, so-called floating/ floating or basis swaps: the credit equivalent amount is measured solely on the basis of the current credit exposure.

of the positive current credit exposures (as determined under section 3(b)(5)(i)(A) of this appendix A) of all individual derivative contracts subject to the qualifying bilateral netting contract.

- (B) Qualifying bilateral netting contract. In determining the current credit exposure for multiple derivative contracts executed with a single counterparty, a bank may net derivative contracts subject to a qualifying bilateral netting contract by offsetting positive and negative mark-to-market values, provided that:
- (1) The qualifying bilateral netting contract is in writing.
- (2) The qualifying bilateral netting contract is not subject to a walkaway clause.
- (3) The qualifying bilateral netting contract creates a single legal obligation for all individual derivative contracts covered by the qualifying bilateral netting contract. In effect, the qualifying bilateral netting contract must provide that the bank would have a single claim or obligation either to receive or to pay only the net amount of the sum of the positive and negative mark-to-market values on the individual derivative contracts covered by the qualifying bilateral netting contract. The single legal obligation for the net amount is operative in the event that a counterparty, or a counterparty to whom the qualifying bilateral netting contract has been assigned, fails to perform due to any of the following events: default, insolvency, bankruptcy, or other similar circumstances.
- (4) The bank obtains a written and reasoned legal opinion(s) that represents, with a high degree of certainty, that in the event of a legal challenge, including one resulting from default, insolvency, bankruptcy, or similar circumstances, the relevant court and administrative authorities would find the bank's exposure to be the net amount
- (i) The law of the jurisdiction in which the counterparty is chartered or the equivalent location in the case of noncorporate entities, and if a branch of the counterparty is involved, then also under the law of the jurisdiction in which the branch is located:
- (ii) The law of the jurisdiction that governs the individual derivative contracts covered by the bilateral netting contract; and
- (iii) The law of the jurisdiction that governs the qualifying bilateral netting contract.
- (5) The bank establishes and maintains procedures to monitor possible changes in relevant law and to ensure that the qualifying bilateral netting contract continues to satisfy the requirement of this section.

- (6) The bank maintains in its files documentation adequate to support the netting of a derivative contract. 21
- (iii) Risk weighting. Once the bank determines the credit equivalent amount for a derivative contract or a set of derivative contracts subject to a qualifying bilateral netting contract, the bank assigns that amount to the risk weight category appropriate to the counterparty, or, if relevant, the nature of any collateral or guarantee. ²² However, the maximum weight that will be applied to the credit equivalent amount of such derivative contract(s) is 50 percent.
- (iv) Exceptions. The following derivative contracts are not subject to the above calculation, and therefore, are not part of the denominator of a national bank's risk-based capital ratio:
- (A) An exchange rate contract with an original maturity of 14 calendar days or less;²³ and
- (B) A derivative contract that is traded on an exchange requiring the daily payment of any variations in the market value of the contract.

Section 4. Recourse, Direct Credit Substitutes and Positions in Securitizations

- (a) *Definitions*. For purposes of this section 4 of this appendix A, the following definitions apply:
- (1) Credit derivative means a contract that allows one party (the protection purchaser) to transfer the credit risk of an asset or off-

²²Derivative contracts are an exception to the general rule of applying collateral and guarantees to the face value of off-balance sheet items. The sufficiency of collateral and guarantees is determined on the basis of the credit equivalent amount of derivative contracts. However, collateral and guarantees held against a qualifying bilateral netting contract is not recognized for capital purposes unless it is legally available for all contracts included in the qualifying bilateral netting contract.

²³ Notwithstanding section 3(b)(5)(B) of this appendix A, gold contracts do not qualify for this exception.

 $^{^{21}\,\}mathrm{By}$ netting individual derivative contracts for the purpose of calculating its credit equivalent amount, a bank represents that documentation adequate to support the netting of a set of derivative contract is in the bank's files and available for inspection by the OCC. Upon determination by the OCC that a bank's files are inadequate or that a qualifying bilateral netting contract may not be legally enforceable in any one of the bodies of law described in section 3(b)(5)(ii)(B)(3)(i) through (iii) of this appendix A, the underlying derivative contracts may not be netted for the purposes of this section.

balance sheet credit exposure to another party (the protection provider). The value of a credit derivative is dependent, at least in part, on the credit performance of a "reference asset."

- (2) Credit-enhancing interest-only strip means an on-balance sheet asset that, in form or in substance:
- (i) Represents the contractual right to receive some or all of the interest due on transferred assets; and
- (ii) Exposes the bank to credit risk directly or indirectly associated with the transferred assets that exceeds its *pro rata* claim on the assets whether through subordination provisions or other credit enhancing techniques.
- (3) Credit-enhancing representations and warranties means representations and warranties that are made or assumed in connection with a transfer of assets (including loan servicing assets) and that obligate a bank to protect investors from losses arising from credit risk in the assets transferred or the loans serviced. Credit-enhancing representations and warranties include promises to protect a party from losses resulting from the default or nonperformance of another party or from an insufficiency in the value of the collateral. Credit-enhancing representations and warranties do not include:
- (i) Early-default clauses and similar warranties that permit the return of, or premium refund clauses covering, 1–4 family residential first mortgage loans (as described in section 3(a)(3)(iii) of this appendix A) for a period not to exceed 120 days from the date of transfer. These warranties may cover only those loans that were originated within 1 year of the date of transfer;
- (ii) Premium refund clauses that cover assets guaranteed, in whole or in part, by the U.S. Government, a U.S. Government agency, or a U.S. Government-sponsored enterprise, provided the premium refund clauses are for a period not to exceed 120 days from the date of transfer: or
- (iii) Warranties that permit the return of assets in instances of fraud, misrepresentation or incomplete documentation.
- (4) Direct credit substitute means an arrangement in which a bank assumes, in form or in substance, credit risk associated with an onor off-balance sheet asset or exposure that was not previously owned by the bank (third-party asset) and the risk assumed by the bank exceeds the pro rata share of the bank's interest in the third-party asset. If a bank has no claim on the third-party asset, then the bank's assumption of any credit risk is a direct credit substitute. Direct credit substitutes include:
- (i) Financial standby letters of credit that support financial claims on a third party that exceed a bank's *pro rata* share in the financial claim:
- (ii) Guarantees, surety arrangements, credit derivatives and similar instruments back-

ing financial claims that exceed a bank's *pro* rata share in the financial claim;

- (iii) Purchased subordinated interests that absorb more than their *pro rata* share of losses from the underlying assets;
- (iv) Credit derivative contracts under which the bank assumes more than its *pro rata* share of credit risk on a third-party asset or exposure;
- (v) Loans or lines of credit that provide credit enhancement for the financial obligations of a third party;
- (vi) Purchased loan servicing assets if the servicer is responsible for credit losses or if the servicer makes or assumes credit-enhancing representations and warranties with respect to the loans serviced. Mortgage servicer case advances that meet the conditions of section 4(a)(8)(i) and (ii) of this appendix A, are not direct credit substitutes;
- (vii) Clean-up calls on third-party assets. Clean-up calls that are 10% or less of the original pool balance and that are exercisable at the option of the bank are not direct credit substitutes; and
- (viii) Unused portion of noneligible assetbacked commercial paper liquidity facilities.
- (5) Externally rated means that an instrument or obligation has received a credit rating from at least one nationally recognized statistical rating organization.
- (6) Face amount means the notional principal, or face value, amount of an off-balance sheet item; the amortized cost of an asset not held for trading purposes; and the fair value of a trading asset.
- (7) Financial asset means cash or other monetary instrument, evidence of debt, evidence of an ownership interest in an entity, or a contract that conveys a right to receive or exchange cash or another financial instrument from another party.
- (8) Financial standby letter of credit means a letter of credit or similar arrangement that represents an irrevocable obligation to a third-party beneficiary:
- (i) To repay money borrowed by, or advanced to, or for the account of, a second party (the account party); or
- (ii) To make payment on behalf of the account party, in the event that the account party fails to fulfill its obligation to the beneficiary.
- (9) Mortgage servicer cash advance means funds that a residential mortgage servicer advances to ensure an uninterrupted flow of payments, including advances made to cover foreclosure costs or other expenses to facilitate the timely collection of the loan. A mortgage servicer cash advance is not a recourse obligation or a direct credit substitute if:
- (i) The servicer is entitled to full reimbursement and this right is not subordinated to other claims on the cash flows from the underlying asset pool; or

- (ii) For any one loan, the servicer's obligation to make nonreimbursable advances is contractually limited to an insignificant amount of the outstanding principal amount of that loan.
- (10) Nationally recognized statistical rating organization (NRSRO) means an entity recognized by the Division of Market Regulation of the Securities and Exchange Commission (or any successor Division) (Commission) as a nationally recognized statistical rating organization for various purposes, including the Commission's uniform net capital requirements for brokers and dealers.
- (11) Recourse means a bank's retention, in form or in substance, of any credit risk directly or indirectly associated with an asset it has sold that exceeds a pro rata share of that bank's claim on the asset. If a bank has no claim on a sold asset, then the retention of any credit risk is recourse. A recourse obligation typically arises when a bank transfers assets and retains an explicit obligation to repurchase assets or to absorb losses due to a default on the payment of principal or interest or any other deficiency in the performance of the underlying obligor or some other party. Recourse may also exist implicitly if a bank provides credit enhancement beyond any contractual obligation to support assets it has sold. The following are examples of recourse arrangements:
- (i) Credit-enhancing representations and warranties made on transferred assets;
- (ii) Loan servicing assets retained pursuant to an agreement under which the bank will be responsible for losses associated with the loans serviced. Mortgage servicer cash advances that meet the conditions of section 4(a)(9)(i) and (ii) of this appendix A, are not recourse arrangements;
- (iii) Retained subordinated interests that absorb more than their *pro rata* share of losses from the underlying assets:
- (iv) Assets sold under an agreement to repurchase, if the assets are not already included on the balance sheet:
- (v) Loan strips sold without contractual recourse where the maturity of the transferred portion of the loan is shorter than the maturity of the commitment under which the loan is drawn;
- (vi) Credit derivatives issued that absorb more than the bank's pro rata share of losses from the transferred assets;
- (vii) Clean-up calls. Clean-up calls that are 10% or less of the original pool balance and that are exercisable at the option of the bank are not recourse arrangements: and
- (viii) Noneligible asset-backed commercial paper liquidity facilities.
- (12) Residual interest means any on-balance sheet asset that represents an interest (including a beneficial interest) created by a transfer that qualifies as a sale (in accordance with generally accepted accounting principles) of financial assets, whether

- through a securitization or otherwise, and that exposes a bank to any credit risk directly or indirectly associated with the transferred asset that exceeds a pro rata share of that bank's claim on the asset. whether through subordination provisions or other credit enhancement techniques. Residual interests generally include credit-enhancing interest-only strips, spread accounts, cash collateral accounts, retained subordinated interests (and other forms of overcollateralization) and similar assets that function as a credit enhancement. Residual interests further include those exposures that, in substance, cause the bank to retain the credit risk of an asset or exposure that had qualified as a residual interest before it was sold. Residual interests generally do not include interests purchased from a third party.
- (13) Risk participation means a participation in which the originating party remains liable to the beneficiary for the full amount of an obligation (e.g. a direct credit substitute) notwithstanding that another party has acquired a participation in that obligation.
- (14) Securitization means the pooling and repackaging by a special purpose entity of assets or other credit exposures that can be sold to investors. Securitization includes transactions that create stratified credit risk positions whose performance is dependent upon an underlying pool of credit exposures, including loans and commitments.
- (15) Structured finance program means a program where receivable interests and assetbacked securities issued by multiple participants are purchased by a special purpose entity that repackages those exposures into securities that can be sold to investors. Structured finance programs allocate credit risks, generally, between the participants and credit enhancement provided to the program.
- (16) Traded position means a position retained, assumed or issued in connection with a securitization that is externally rated, where there is a reasonable expectation that, in the near future, the rating will be relied upon by:
- (i) Unaffiliated investors to purchase the position; or
- (ii) An unaffiliated third party to enter into a transaction involving the position, such as a purchase, loan or repurchase agreement.
- (b) Credit equivalent amounts and risk weights of recourse obligations and direct credit substitutes—(1) Credit-equivalent amount. Except as otherwise provided, the credit-equivalent amount for a recourse obligation or direct credit substitute is the full amount of the credit-enhanced assets for which the bank directly or indirectly retains or assumes credit risk multiplied by a 100% conversion factor.
- (2) Risk-weight factor. To determine the bank's risk-weighted assets for off-balance

sheet recourse obligations and direct credit substitutes, the credit equivalent amount is assigned to the risk category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral. For a direct credit substitute that is an on-balance sheet asset (e.g., a purchased subordinated security), a bank must calculate risk-weighted assets using the amount of the direct credit substitute and the full amount of the assets it supports, i.e., all the more senior positions in the structure

(c) Credit equivalent amount and risk weight of participations in, and syndications of, direct credit substitutes. The credit equivalent amount for a participation interest in, or syndication of, a direct credit substitute is calculated and risk weighted as follows:

(1) In the case of a direct credit substitute in which a bank has conveyed a risk participation, the full amount of the assets that are supported by the direct credit substitute is converted to a credit equivalent amount using a 100% conversion factor. The pro rata share of the credit equivalent amount that has been conveyed through a risk participation is then assigned to whichever riskweight category is lower: the risk-weight category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral, or the risk-weight category appropriate to the party acquiring the participation. The prorata share of the credit equivalent amount that has not been participated out is assigned to the risk-weight category appropriate to the obligor after considering any associated guarantees or collateral.

(2) In the case of a direct credit substitute in which the bank has acquired a risk par-

ticipation, the acquiring bank's pro rata share of the direct credit substitute is multiplied by the full amount of the assets that are supported by the direct credit substitute and converted using a 100% credit conversion factor. The resulting credit equivalent amount is then assigned to the risk-weight category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral.

(3) In the case of a direct credit substitute that takes the form of a syndication where each bank or participating entity is obligated only for its pro rata share of the risk and there is no recourse to the originating entity, each bank's credit equivalent amount will be calculated by multiplying only its prorata share of the assets supported by the direct credit substitute by a 100% conversion factor. The resulting credit equivalent amount is then assigned to the risk-weight category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral.

(d) Externally rated positions: credit-equivalent amounts and risk weights-(1) Traded positions. With respect to a recourse obligation, direct credit substitute, residual interest (other than a credit-enhancing interest-only strip) or asset- or mortgage-backed security that is a "traded position" and that has received an external rating on a long-term position that is one grade below investment grade or better or a short-term position that is investment grade, the bank may multiply the face amount of the position by the appropriate risk weight, determined in accordance with Tables C or D of this appendix A.24 If a traded position receives more than one external rating, the lowest single rating will apply.

TABLE C

Long-term rating category	Examples	Risk weight (In percent)
Lowest investment grade	AAA, AA	20 50 100 200

TABLE D

Short-term rating category	Examples	Risk weight (In percent)
Highest investment grade Second highest investment grade Lowest investment grade	A–2, P–2	50

 $^{^{24}{\}rm Stripped}$ mortgage-backed securities or other similar instruments, such as interest-only or principal-only strips, that are not

credit enhancing must be assigned to the 100% risk category.

- (2) Non-traded positions. A recourse obligation, direct credit substitute, residual interest (but not a credit-enhancing interest-only strip) or asset- or mortgage-backed security extended in connection with a securitization that is not a "traded position" may be assigned a risk weight in accordance with section 4(d)(1) of this appendix A if:
- (i) It has been externally rated by more than one NRSRO:
- (ii) It has received an external rating on a long-term position that is one category below investment grade or better or a shortterm position that is investment grade by all NRSROs providing a rating;
- (iii) The ratings are publicly available; and (iv) The ratings are based on the same criteria used to rate traded positions.
- If the ratings are different, the lowest rating will determine the risk category to which the recourse obligation, residual interest or direct credit substitute will be assigned.
- (e) Senior positions not externally rated. For a recourse obligation, direct credit substitute, residual interest or asset- or mortgage-backed security that is not externally rated but is senior or preferred in all features to a traded position (including collateralization and maturity), a bank may apply a risk weight to the face amount of the senior position in accordance with section 4(d)(1) of this appendix A, based upon the traded position, subject to any current or prospective supervisory guidance and the bank satisfying the OCC that this treatment is appropriate. This section will apply only if traded position provides substantive credit support to the unrated position until the unrated position matures.
- (f) Residual Interests—(1) Concentration limit on credit-enhancing interest-only strips. In addition to the capital requirement provided by section 4(f)(2) of this appendix A, a bank must deduct from Tier 1 capital all creditenhancing interest-only strips in excess of 25 percent of Tier 1 capital in accordance with section 2(c)(2)(iv) of this appendix A.
- (2) Credit-enhancing interest-only strip capital requirement. After applying the concentration limit to credit-enhancing interest-only strips in accordance with section (f)(1), a bank must maintain risk-based capital for a credit-enhancing interest-only strip equal to the remaining amount of the

credit-enhancing interest-only strip (net of any existing associated deferred tax liability), even if the amount of risk-based capital required to be maintained exceeds the full risk-based capital requirement for the assets transferred. Transactions that, in substance, result in the retention of credit risk associated with a transferred credit-enhancing interest-only strip will be treated as if the credit-enhancing interest-only strip was retained by the bank and not transferred

- (3) Other residual interests capital requirement. Except as provided in sections (d) or (e) of this section, a bank must maintain riskbased capital for a residual interest (excluding a credit-enhancing interest-only strip) equal to the face amount of the residual interest that is retained on the balance sheet (net of any existing associated deferred tax liability), even if the amount of risk-based capital required to be maintained exceeds the full risk-based capital requirement for the assets transferred. Transactions that, in substance, result in the retention of credit risk associated with a transferred residual interest will be treated as if the residual interest was retained by the bank and not transferred.
- (4) Residual interests and other recourse obligations. Where the aggregate capital requirement for residual interests (including creditenhancing interest-only strips) and recourse obligations arising from the same transfer of assets exceed the full risk-based capital requirement for those assets, a bank must maintain risk-based capital equal to the greater of the risk-based capital requirement for the residual interest as calculated under sections 4(f)(1) through (3) of this appendix A or the full risk-based capital requirement for the assets transferred.
- (g) Positions that are not rated by an NRSRO. A position (but not a residual interest) extended in connection with a securitization and that is not rated by an NRSRO may be risk-weighted based on the bank's determination of the credit rating of the position, as specified in Table E of this appendix A, multiplied by the face amount of the position. In order to qualify for this treatment, the bank's system for determining the credit rating of the position must meet one of the three alternative standards set out in section 4(g)(1)through (3) of this appendix A.

TABLE E

Rating category	Examples	Risk weight (In percent)
Investment grade One category below investment grade	BBB, or betterBB	100 200

programs. A direct credit substitute (but not

(1) Internal risk rating used for asset-backed a purchased credit-enhancing interest-only strip) is assumed by a bank in connection

with an asset-backed commercial paper program sponsored by the bank and the bank is able to demonstrate to the satisfaction of the OCC, prior to relying upon its use, that the bank's internal credit risk rating system is adequate. Adequate internal credit risk rating systems usually contain the following criteria:

- (i) The internal credit risk system is an integral part of the bank's risk management system that explicitly incorporates the full range of risks arising from a bank's participation in securitization activities:
- (ii) Internal credit ratings are linked to measurable outcomes, such as the probability that the position will experience any loss, the position's expected loss given default, and the degree of variance in losses given default on that position:
- (iii) The bank's internal credit risk system must separately consider the risk associated with the underlying loans or borrowers, and the risk associated with the structure of a particular securitization transaction;
- (iv) The bank's internal credit risk system must identify gradations of risk among "pass" assets and other risk positions;
- (v) The bank must have clear, explicit criteria that are used to classify assets into each internal risk grade, including subjective factors:
- (vi) The bank must have independent credit risk management or loan review personnel assigning or reviewing the credit risk ratings:
- (vii) An internal audit procedure should periodically verify that internal risk ratings are assigned in accordance with the bank's established criteria.
- (viii) The bank must monitor the performance of the internal credit risk ratings assigned to nonrated, nontraded direct credit substitutes over time to determine the appropriateness of the initial credit risk rating assignment and adjust individual credit risk ratings, or the overall internal credit risk ratings system, as needed; and
- (ix) The internal credit risk system must make credit risk rating assumptions that are consistent with, or more conservative than, the credit risk rating assumptions and methodologies of NRSROs.
- (2) Program Ratings. A direct credit substitute or recourse obligation (but not a residual interest) is assumed or retained by a bank in connection with a structured finance program and a NRSRO has reviewed the terms of the program and stated a rating for positions associated with the program. If the program has options for different combinations of assets, standards, internal credit enhancements and other relevant factors, and the NRSRO specifies ranges of rating categories to them, the bank may apply the rating category applicable to the option that corresponds to the bank's position. In order to rely on a program rating, the bank must

demonstrate to the OCC's satisfaction that the credit risk rating assigned to the program meets the same standards generally used by NRSROs for rating traded positions. The bank must also demonstrate to the OCC's satisfaction that the criteria underlying the NRSRO's assignment of ratings for the program are satisfied for the particular position. If a bank participates in a securitization sponsored by another party, the OCC may authorize the bank to use this approach based on a program rating obtained by the sponsor of the program.

- (3) Computer Program. The bank is using an acceptable credit assessment computer program to determine the rating of a direct credit substitute or recourse obligation (but not a residual interest) extended in connection with a structured finance program. A NRSRO must have developed the computer program and the bank must demonstrate to the OCC's satisfaction that ratings under the program correspond credibly and reliably with the rating of traded positions.
- (h) Limitations on risk-based capital requirements—(1) Low-level exposure rule. If the maximum contractual exposure to loss retained or assumed by a bank is less than the effective risk-based capital requirement, as determined in accordance with section 4(b) of this appendix A, for the asset supported by the bank's position, the risk based capital required under this appendix A is limited to the bank's contractual exposure, less any recourse liability account established in accordance with generally accepted accounting principles. This limitation does not apply when a bank provides credit enhancement beyond any contractual obligation to support assets that it has sold.
- (2) Related on-balance sheet assets. If an asset is included in the calculation of the risk-based capital requirement under this section 4 of this appendix A and also appears as an asset on a bank's balance sheet, the asset is risk-weighted only under this section 4 of this appendix A, except in the case of loan servicing assets and similar arrangements with embedded recourse obligations or direct credit substitutes. In that case, both the on-balance sheet servicing assets and the related recourse obligations or direct credit substitutes must both be separately risk weighted and incorporated into the risk-based capital calculation.
- (i) Alternative Capital Calculation for Small Business Obligations—(1) Definitions. For purposes of this section 4(i):
 - (i) Qualified bank means a bank that:
- (A) Is well capitalized as defined in 12 CFR 6.4 without applying the capital treatment described in this section 4(i), or
- (B) Is adequately capitalized as defined in 12 CFR 6.4 without applying the capital treatment described in this section 4(i) and has received written permission from the appropriate district office of the OCC to apply

the capital treatment described in this section 4(i).

- (ii) *Recourse* has the meaning given to such term under generally accepted accounting principles.
- (iii) Small business means a business that meets the criteria for a small business concern established by the Small Business Administration in 13 CFR part 121 pursuant to 15 U.S.C. 632.
- (2) Capital and reserve requirements. Notwithstanding the risk-based capital treatment outlined in section 2(c)(4) and any other subsection (other than subsection (i)) of this section 4, with respect to a transfer of a small business loan or a lease of personal property with recourse that is a sale under generally accepted accounting principles, a qualified bank may elect to apply the following treatment:
- (i) The bank establishes and maintains a non-capital reserve under generally accepted accounting principles sufficient to meet the reasonable estimated liability of the bank under the recourse arrangement; and
- (ii) For purposes of calculating the bank's risk-based capital ratio, the bank includes only the face amount of its recourse in its risk-weighted assets.
- (3) Limit on aggregate amount of recourse. The total outstanding amount of recourse retained by a qualified bank with respect to transfers of small business loans and leases of personal property and included in the risk-weighted assets of the bank as described in section 4(i)(2) of this appendix A may not exceed 15 percent of the bank's total capital after adjustments and deductions, unless the OCC specifies a greater amount by order.
- (4) Bank that ceases to be qualified or that exceeds aggregate limit. If a bank ceases to be a qualified bank or exceeds the aggregate limit in section 4(i)(3) of this appendix A, the bank may continue to apply the capital treatment described in section 4(i)(2) of this appendix A to transfers of small business loans and leases of personal property that occurred when the bank was qualified and did not exceed the limit.
- (5) Prompt Corrective Action not affected. (i) A bank shall compute its capital without regard to this section 4(i) for purposes of prompt corrective action (12 U.S.C. 18310 and 12 CFR part 6) unless the bank is an adequately or well capitalized bank (without applying the capital treatment described in this section 4(i)) and, after applying the capital treatment described in this section 4(i), the bank would be well capitalized.
- (ii) A bank shall compute its capital without regard to this section 4(i) for purposes of 12 U.S.C. 1831o(g) regardless of the bank's capital level.

- Section 5. Optional transition provisions related to the implementation of consolidation requirements under FAS 167.
- (a) This section 5 provides optional transition provisions for a national bank that is required for financial and regulatory reporting purposes, as a result of its implementation of Statement of Financial Accounting Standards No. 167, Amendments to FASB Interpretation No. 46(R) (FAS 167), to consolidate certain variable interest entities (VIEs) as defined under United States generally accepted accounting principles (GAAP). These transition provisions apply through the end of the fourth quarter following the date of a bank's implementation of FAS 167 (implementation date).
- (b) Exclusion period. (1) Exclusion of risk-weighted assets for the first and second quarters. For the first two quarters after the implementation date (exclusion period), including for the two calendar quarter-end regulatory report dates within those quarters, a bank may exclude from risk-weighted assets:
- (i) Subject to the limitations in paragraph (d) of this section 5, assets held by a VIE, provided that the following conditions are met:
- (A) The VIE existed prior to the implementation date:
- (B) The bank did not consolidate the VIE on its balance sheet for calendar quarter-end regulatory report dates prior to the implementation date;
- (C) The bank must consolidate the VIE on its balance sheet beginning as of the implementation date as a result of its implementation of FAS 167; and
- (D) The bank excludes all assets held by VIEs described in paragraphs (b)(1)(i)(A) through (C) of this section 5; and
- (ii) Subject to the limitations of paragraph (d) of this section 5, assets held by a VIE that is a consolidated asset-backed commercial paper (ABCP) program, provided that the following conditions are met:
- (A) The bank is the sponsor of the ABCP program:
- (B) Prior to the implementation date, the bank consolidated the VIE onto its balance sheet under GAAP and excluded the VIE's assets from the bank's risk-weighted assets; and
- (C) The bank chooses to exclude all assets held by ABCP program VIEs described in paragraphs (b)(1)(ii)(A) and (B) of this section 5.
- (2) Risk-weighted assets during exclusion period. During the exclusion period, including the two calendar quarter-end regulatory report dates within the exclusion period, a bank adopting the optional provisions of this paragraph (b) of this section 5 must calculate risk-weighted assets for its contractual exposures to the VIEs referenced in paragraph (b)(1) of this section 5 on the implementation

date and include this calculated amount in its risk-weighted assets. Such contractual exposures may include direct-credit substitutes, recourse obligations, residual interests, liquidity facilities, and loans.

(3) Inclusion of ALLL in Tier 2 capital for the first and second quarters. During the exclusion period, including for the two calendar quarter-end regulatory report dates within the exclusion period, a bank that excludes VIE assets from risk-weighted assets pursuant to paragraph (b)(1) of this section may include in Tier 2 capital the full amount of the allowance for loan and lease losses (ALLL) calculated as of the implementation date that is attributable to the assets it excludes pursuant to paragraph (b)(1) of this section 5 (inclusion amount). The amount of ALLL includable in Tier 2 capital in accordance with this paragraph shall not be subject to the limitations set forth in section 2(b)(1) of this appendix A.

(c) Phase-in period. (1) Exclusion amount. For purposes of this paragraph (c), exclusion amount is defined as the amount of riskweighted assets excluded in paragraph (b)(1) of this section as of the implementation

(2) Risk-weighted assets during the third and fourth quarters. A bank that excludes assets of consolidated VIEs from risk-weighted assets pursuant to paragraph (b)(1) of this section may, for the third and fourth quarters after the implementation date (phase-in period), including for the two calendar quarterend regulatory report dates within those quarters, exclude from risk-weighted assets 50 percent of the exclusion amount, provided that the bank may not include in riskweighted assets pursuant to this paragraph an amount less than the aggregate riskweighted assets calculated pursuant to paragraph (b)(2) of this section.

(3) Inclusion of ALLL in Tier 2 capital during the third and fourth quarters. A bank that excludes assets of consolidated VIEs from riskweighted assets pursuant to paragraph (c)(2) of this section may, for the phase-in period, include in Tier 2 capital 50 percent of the inclusion amount it included in Tier 2 capital during the exclusion period, notwithstanding the limit on including ALLL in Tier 2 capital in section 2(b)(1) of this appendix A.

(d) Implicit recourse limitation. Notwithstanding any other provision in this section 5, assets held by a VIE to which the bank has provided recourse through credit enhancement beyond any contractual obligation to support assets it has sold may not be excluded from risk-weighted assets.

[54 FR 4177, Jan. 27, 1989]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting appendix A to part 3 of title 12, see the List of CFR Sections Affected. which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

APPENDIX B TO PART 3—RISK-BASED CAPITAL GUIDELINES; MARKET RISK

Section 1 Purpose, Applicability, and Reservation of Authority

Section 2 Definitions

Section 3 Requirements for Application of the Market Risk Capital Rule

Section 4 Adjustments to the Risk-Based

Capital Ratio Calculations

Section 5 VaR-based Measure Section 6 Stressed VaR-based Measure

Section 7 Specific Risk

Section 8 Incremental Risk

Section 9 Comprehensive Risk

Section 10 Standardized Measurement Method for Specific Risk

Section 11 Simplified Supervisory Formula Approach

Section 12 Market Risk Disclosures

Section 1. Purpose, Applicability, and Reservation of Authority

(a) Purpose. This appendix establishes riskbased capital requirements for banks with significant exposure to market risk and provides methods for these banks to calculate their risk-based capital requirements for market risk. This appendix supplements and adjusts the risk-based capital calculations under appendix A to this part and appendix C to this part and establishes public disclosure requirements.

(b) Applicability. (1) This appendix applies to any bank with aggregate trading assets and trading liabilities (as reported in the bank's most recent quarterly Consolidated Reports of Condition and Income (Call Report)), equal to:

- (i) 10 percent or more of quarter-end total assets as reported on the most recent quarterly Call Report; or
- (ii) \$1 billion or more.
- (2) The OCC may apply this appendix to any bank if the OCC deems it necessary or appropriate because of the level of market risk of the bank or to ensure safe and sound banking practices.
- (3) The OCC may exclude a bank that meets the criteria of paragraph (b)(1) of this section from application of this appendix if the OCC determines that the exclusion is appropriate based on the level of market risk of the bank and is consistent with safe and sound banking practices.
- (c) Reservation of authority. (1) The OCC may require a bank to hold an amount of capital greater than otherwise required under this appendix if the OCC determines that the bank's capital requirement for market risk as calculated under this appendix is not commensurate with the market risk of the bank's covered positions. In making determinations under paragraphs (c)(1) through (c)(3) of this section, the OCC will apply notice and response procedures generally in the

same manner as the notice and response procedures set forth in [12 CFR 3.12, 12 CFR 263.202, 12 CFR 325.6(c), 12 CFR 567.3(d)].

- (2) If the OCC determines that the risk-based capital requirement calculated under this appendix by the bank for one or more covered positions or portfolios of covered positions is not commensurate with the risks associated with those positions or portfolios, the OCC may require the bank to assign a different risk-based capital requirement to the positions or portfolios that more accurately reflects the risk of the positions or portfolios.
- (3) The OCC may also require a bank to calculate risk-based capital requirements for specific positions or portfolios under this appendix, or under appendix C to this part or appendix A to this part, as appropriate, to more accurately reflect the risks of the positions.
- (4) Nothing in this appendix limits the authority of the OCC under any other provision of law or regulation to take supervisory or enforcement action, including action to address unsafe or unsound practices or conditions, deficient capital levels, or violations of law.

Section 2. Definitions

For purposes of this appendix, the following definitions apply:

Affiliate with respect to a company means any company that controls, is controlled by, or is under common control with, the company.

Backtesting means the comparison of a bank's internal estimates with actual outcomes during a sample period not used in model development. For purposes of this appendix, backtesting is one form of out-of-sample testing.

Bank holding company is defined in section 2(a) of the Bank Holding Company Act of 1956 (12 U.S.C. 1841(a)).

Commodity position means a position for which price risk arises from changes in the price of a commodity.

Company means a corporation, partnership, limited liability company, depository institution, business trust, special purpose entity, association, or similar organization.

Control A person or company controls a company if it:

- (1) Owns, controls, or holds with power to vote 25 percent or more of a class of voting securities of the company; or
- (2) Consolidates the company for financial reporting purposes.

Corporate debt position means a debt position that is an exposure to a company that is not a sovereign entity, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, a multilateral development bank, a depository institution, a foreign bank, a credit union, a public sector

entity, a government-sponsored entity, or a securitization.

Correlation trading position means:

- (1) A securitization position for which all or substantially all of the value of the underlying exposures is based on the credit quality of a single company for which a two-way market exists, or on commonly traded indices based on such exposures for which a two-way market exists on the indices; or
- (2) A position that is not a securitization position and that hedges a position described in paragraph (1) of this definition; and
- (3) A correlation trading position does not include:
- (i) A resecuritization position;
- (ii) A derivative of a securitization position that does not provide a pro rata share in the proceeds of a securitization tranche; or
- (iii) A securitization position for which the underlying assets or reference exposures are retail exposures, residential mortgage exposures, or commercial mortgage exposures.
- Country risk classification (CRC) for a sovereign entity means the consensus CRC published from time to time by the Organization for Economic Cooperation and Development that provides a view of the likelihood that the sovereign entity will service its external debt.

Covered position means the following positions:

- (1) A trading asset or trading liability (whether on- or off-balance sheet), ⁴³ as reported on Schedule RC-D of the Call Report or Schedule HC-D of the FR Y-9C, that meets the following conditions:
- (i) The position is a trading position or hedges another covered position; ⁴⁴ and
- (ii) The position is free of any restrictive covenants on its tradability or the bank is able to hedge the material risk elements of the position in a two-way market;
- (2) A foreign exchange or commodity position, regardless of whether the position is a trading asset or trading liability (excluding any structural foreign currency positions that the bank chooses to exclude with prior supervisory approval); and
- (3) Notwithstanding paragraphs (1) and (2) of this definition, a covered position does not include:
- (i) An intangible asset, including any servicing asset;
- (ii) Any hedge of a trading position that the OCC determines to be outside the scope of the bank's hedging strategy required in paragraph (a)(2) of section 3 of this appendix;

⁴³ Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

⁴⁴ A position that hedges a trading position must be within the scope of the bank's hedging strategy as described in paragraph (a)(2) of section 3 of this appendix.

- (iii) Any position that, in form or substance, acts as a liquidity facility that provides support to asset-backed commercial paper;
- (iv) A credit derivative the bank recognizes as a guarantee for risk-weighted asset amount calculation purposes under appendix C to this part or appendix A to this part;
- (v) Any equity position that is not publicly traded, other than a derivative that references a publicly traded equity;
- (vi) Any position a bank holds with the intent to securitize; or
- (vii) Any direct real estate holding.

Credit derivative means a financial contract executed under standard industry documentation that allows one party (the protection purchaser) to transfer the credit risk of one or more exposures (reference exposure(s)) to another party (the protection provider).

Credit union means an insured credit union as defined under the Federal Credit Union Act (12 U.S.C. 1752).

Default by a sovereign entity means non-compliance by the sovereign entity with its external debt service obligations or the inability or unwillingness of a sovereign entity to service an existing obligation according to its original contractual terms, as evidenced by failure to pay principal and interest timely and fully, arrearages, or restructuring.

Debt position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in interest rates or credit spreads.

Depository institution is defined in section 3 of the Federal Deposit Insurance Act (12 U.S.C. 1813).

Equity position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in equity prices.

Event risk means the risk of loss on equity or hybrid equity positions as a result of a financial event, such as the announcement or occurrence of a company merger, acquisition, spin-off, or dissolution.

Foreign bank means a foreign bank as defined in $\S 211.2$ of the Federal Reserve Board's Regulation K (12 CFR 211.2), other than a depository institution.

Foreign exchange position means a position for which price risk arises from changes in foreign exchange rates.

General market risk means the risk of loss that could result from broad market movements, such as changes in the general level of interest rates, credit spreads, equity prices, foreign exchange rates, or commodity prices.

General obligation means a bond or similar obligation that is guaranteed by the full

faith and credit of states or other political subdivisions of a sovereign entity.

Government-sponsored entity (GSE) means an entity established or chartered by the U.S. government to serve public purposes specified by the U.S. Congress but whose debt obligations are not explicitly guaranteed by the full faith and credit of the U.S. government.

Hedge means a position or positions that offset all, or substantially all, of one or more material risk factors of another position.

Idiosyncratic risk means the risk of loss in the value of a position that arises from changes in risk factors unique to that position.

Incremental risk means the default risk and credit migration risk of a position. Default risk means the risk of loss on a position that could result from the failure of an obligor to make timely payments of principal or interest on its debt obligation, and the risk of loss that could result from bankruptcy, insolvency, or similar proceeding. Credit migration risk means the price risk that arises from significant changes in the underlying credit quality of the position.

Investment grade means that the entity to which the bank is exposed through a loan or security, or the reference entity with respect to a credit derivative, has adequate capacity to meet financial commitments for the projected life of the asset or exposure. Such an entity or reference entity has adequate capacity to meet financial commitments if the risk of its default is low and the full and timely repayment of principal and interest is expected.

Market risk means the risk of loss on a position that could result from movements in market prices.

Multilateral development bank means the International Bank for Reconstruction and Development, the Multilateral Investment Guarantee Agency, the International Finance Corporation, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the European Investment Fund, the Nordic Investment Bank, the Caribbean Development Bank, the Islamic Development Bank, the Council of Europe Development Bank, and any other multilateral lending institution or regional development bank in which the U.S. government is a shareholder or contributing member or which the OCC determines poses comparable credit risk.

Nth-to-default credit derivative means a credit derivative that provides credit protection only for the nth-defaulting reference exposure in a group of reference exposures.

Over-the-counter (OTC) derivative means a derivative contract that is not traded on an exchange that requires the daily receipt and payment of cash-variation margin.

Public sector entity (PSE) means a state, local authority, or other governmental subdivision below the sovereign entity level.

Publicly traded means traded on:

- (1) Any exchange registered with the SEC as a national securities exchange under section 6 of the Securities Exchange Act of 1934 (15 U.S.C. 78f); or
- (2) Any non-U.S.-based securities exchange that:
- (i) Is registered with, or approved by, a national securities regulatory authority; and
- (ii) Provides a liquid, two-way market for the instrument in question.
- Qualifying securities borrowing transaction means a cash-collateralized securities borrowing transaction that meets the following conditions:
- (1) The transaction is based on liquid and readily marketable securities;
- (2) The transaction is marked-to-market daily;
- (3) The transaction is subject to daily margin maintenance requirements; and
- (4)(i) The transaction is a securities contract for the purposes of section 555 of the Bankruptcy Code (11 U.S.C. 555), a qualified financial contract for the purposes of section 11(e)(8) of the Federal Deposit Insurance Act (12 U.S.C. 1821(e)(8)), or a netting contract between or among financial institutions for the purposes of sections 401–407 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 4401–4407) or the Board's Regulation EE (12 CFR part 231); or
- (ii) If the transaction does not meet the criteria in paragraph (4)(i) of this definition, either:
- (A) The bank has conducted sufficient legal review to reach a well-founded conclusion that:
- (1) The securities borrowing agreement executed in connection with the transaction provides the bank the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set off collateral promptly upon an event of counterparty default, including in a bankruptcy, insolvency, or other similar proceeding of the counterparty; and
- (2) Under applicable law of the relevant jurisdiction, its rights under the agreement are legal, valid, binding, and enforceable and any exercise of rights under the agreement will not be staved or avoided: or
- (B) The transaction is either overnight or unconditionally cancelable at any time by the bank, and the bank has conducted sufficient legal review to reach a well-founded conclusion that:
- (1) The securities borrowing agreement executed in connection with the transaction provides the bank the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set off collateral promptly upon an event of counterparty default; and

(2) Under the law governing the agreement, its rights under the agreement are legal, valid, binding, and enforceable.

Resecuritization means a securitization in which one or more of the underlying exposures is a securitization position.

Resecuritization position means a covered position that is:

- (1) An on- or off-balance sheet exposure to a resecuritization; or
- (2) An exposure that directly or indirectly references a resecuritization exposure in paragraph (1) of this definition.

Revenue obligation means a bond or similar obligation, including loans and leases, that is an obligation of a state or other political subdivision of a sovereign entity, but for which the government entity is committed to repay with revenues from the specific project financed rather than with general tax funds.

 $\it SEC$ means the U.S. Securities and Exchange Commission.

Securitization means a transaction in which:

- (1) All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties;
- (2) The credit risk associated with the underlying exposures has been separated into at least two tranches that reflect different levels of seniority;
- (3) Performance of the securitization exposures depends upon the performance of the underlying exposures:
- (4) All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities):
- (5) For non-synthetic securitizations, the underlying exposures are not owned by an operating company;
- (6) The underlying exposures are not owned by a small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682); and
- (7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under 12 U.S.C. 24 (Eleventh).
- (8) The OCC may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet exposures is not a securitization based on the transaction's leverage, risk profile, or economic substance.
- (9) The OCC may deem an exposure to a transaction that meets the definition of a securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a securitization based on the transaction's leverage, risk profile, or economic substance.

Securitization position means a covered position that is:

- (1) An on-balance sheet or off-balance sheet credit exposure (including credit-enhancing representations and warranties) that arises from a securitization (including a resecuritization); or
- (2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition.

Sovereign debt position means a direct exposure to a sovereign entity.

Sovereign entity means a central government (including the U.S. government) or an agency, department, ministry, or central bank of a central government.

Sovereign of incorporation means the country where an entity is incorporated, chartered, or similarly established.

Specific risk means the risk of loss on a position that could result from factors other than broad market movements and includes event risk, default risk, and idiosyncratic risk.

Structural position in a foreign currency means a position that is not a trading position and that is:

- (1) Subordinated debt, equity, or minority interest in a consolidated subsidiary that is denominated in a foreign currency;
- (2) Capital assigned to foreign branches that is denominated in a foreign currency;
- (3) A position related to an unconsolidated subsidiary or another item that is denominated in a foreign currency and that is deducted from the bank's tier 1 and tier 2 capital; or
- (4) A position designed to hedge a bank's capital ratios or earnings against the effect on paragraphs (1), (2), or (3) of this definition of adverse exchange rate movements.

Term repo-style transaction means a repurchase or reverse repurchase transaction, or a securities borrowing or securities lending transaction, including a transaction in which the bank acts as agent for a customer and indemnifies the customer against loss, that has an original maturity in excess of one business day, provided that:

- (1) The transaction is based solely on liquid and readily marketable securities or cash:
- (2) The transaction is marked-to-market daily and subject to daily margin maintenance requirements;
- (3) The transaction is executed under an agreement that provides the bank the right to accelerate, terminate, and close-out the transaction on a net basis and to liquidate or set off collateral promptly upon an event of default (including bankruptcy, insolvency, or similar proceeding) of the counterparty, provided that, in any such case, any exercise of rights under the agreement will not be

stayed or avoided under applicable law in the relevant jurisdictions; $^{\rm 45}$ and

(4) The bank has conducted and documented sufficient legal review to conclude with a well-founded basis that the agreement meets the requirements of paragraph (3) of this definition and is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.

Tier 1 capital is defined in appendix A to this part or appendix C to this part, as applicable

Tier 2 capital is defined in appendix A to this part or appendix C to this part, as applicable.

Trading position means a position that is held by the bank for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short time frame conforming to trade custom.

Underlying exposure means one or more exposures that have been securitized in a securitization transaction.

Value-at-Risk (VaR) means the estimate of the maximum amount that the value of one or more positions could decline due to market price or rate movements during a fixed holding period within a stated confidence interval.

Section 3. Requirements for Application of the Market Risk Capital Rule

- (a) Trading positions. (1) Identification of trading positions. A bank must have clearly defined policies and procedures for determining which of its trading assets and trading liabilities are trading positions and which of its trading positions are correlation trading positions. These policies and procedures must take into account:
- (i) The extent to which a position, or a hedge of its material risks, can be marked-

⁴⁵This requirement is met where all transactions under the agreement are (i) executed under U.S. law and (ii) constitute "securities "repurchase agreements" contracts" orunder section 555 or 559, respectively, of the Bankruptcy Code (11 U.S.C. 555 or 559), qualified financial contracts under section 11(e)(8) of the Federal Deposit Insurance Act (12 U.S.C. 1821(e)(8)), or netting contracts between or among financial institutions under sections 401-407 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 4407), or the Federal Reserve Board's Regulation EE (12 CFR part 231).

to-market daily by reference to a two-way market; and

- (ii) Possible impairments to the liquidity of a position or its hedge.
- (2) Trading and hedging strategies. A bank must have clearly defined trading and hedging strategies for its trading positions that are approved by senior management of the bank.
- (i) The trading strategy must articulate the expected holding period of, and the market risk associated with, each portfolio of trading positions.
- (ii) The hedging strategy must articulate for each portfolio of trading positions the level of market risk the bank is willing to accept and must detail the instruments, techniques, and strategies the bank will use to hedge the risk of the portfolio.
- (b) Management of covered positions. (1) Active management. A bank must have clearly defined policies and procedures for actively managing all covered positions. At a minimum, these policies and procedures must require:
- (i) Marking positions to market or to model on a daily basis;
- (ii) Daily assessment of the bank's ability to hedge position and portfolio risks, and of the extent of market liquidity;
- (iii) Establishment and daily monitoring of limits on positions by a risk control unit independent of the trading business unit;
- (iv) Daily monitoring by senior management of information described in paragraphs (b)(1)(i) through (b)(1)(iii) of this section:
- (v) At least annual reassessment of established limits on positions by senior management; and
- (vi) At least annual assessments by qualified personnel of the quality of market inputs to the valuation process, the soundness of key assumptions, the reliability of parameter estimation in pricing models, and the stability and accuracy of model calibration under alternative market scenarios.
- (2) Valuation of covered positions. The bank must have a process for prudent valuation of its covered positions that includes policies and procedures on the valuation of positions, marking positions to market or to model, independent price verification, and valuation adjustments or reserves. The valuation process must consider, as appropriate, unearned credit spreads, close-out costs, early termination costs, investing and funding costs, liquidity, and model risk.
- (c) Requirements for internal models. (1) A bank must obtain the prior written approval of the OCC before using any internal model to calculate its risk-based capital requirement under this appendix.
- (2) A bank must meet all of the requirements of this section on an ongoing basis. The bank must promptly notify the OCC when:

- (i) The bank plans to extend the use of a model that the OCC has approved under this appendix to an additional business line or product type;
- (ii) The bank makes any change to an internal model approved by the OCC under this appendix that would result in a material change in the bank's risk-weighted asset amount for a portfolio of covered positions; or
- (iii) The bank makes any material change to its modeling assumptions.
- (3) The OCC may rescind its approval of the use of any internal model (in whole or in part) or of the determination of the approach under section 9(a)(2)(ii) of this appendix for a bank's modeled correlation trading positions and determine an appropriate capital requirement for the covered positions to which the model would apply, if the OCC determines that the model no longer complies with this appendix or fails to reflect accurately the risks of the bank's covered positions.
- (4) The bank must periodically, but no less frequently than annually, review its internal models in light of developments in financial markets and modeling technologies, and enhance those models as appropriate to ensure that they continue to meet the OCC's standards for model approval and employ risk measurement methodologies that are most appropriate for the bank's covered positions.
- (5) The bank must incorporate its internal models into its risk management process and integrate the internal models used for calculating its VaR-based measure into its daily risk management process.
- (6) The level of sophistication of a bank's internal models must be commensurate with the complexity and amount of its covered positions. A bank's internal models may use any of the generally accepted approaches, including but not limited to variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.
- (7) The bank's internal models must properly measure all the material risks in the covered positions to which they are applied.
- (8) The bank's internal models must conservatively assess the risks arising from less liquid positions and positions with limited price transparency under realistic market scenarios.
- (9) The bank must have a rigorous and well-defined process for re-estimating, re-evaluating, and updating its internal models to ensure continued applicability and relevance.
- (10) If a bank uses internal models to measure specific risk, the internal models must also satisfy the requirements in paragraph (b)(1) of section 7 of this appendix.
- (d) Control, oversight, and validation mechanisms. (1) The bank must have a risk control

unit that reports directly to senior management and is independent from the business trading units.

- (2) The bank must validate its internal models initially and on an ongoing basis. The bank's validation process must be independent of the internal models' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:
- (i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the internal models;
- (ii) An ongoing monitoring process that includes verification of processes and the comparison of the bank's model outputs with relevant internal and external data sources or estimation techniques; and
- (iii) An outcomes analysis process that includes backtesting. For internal models used to calculate the VaR-based measure, this process must include a comparison of the changes in the bank's portfolio value that would have occurred were end-of-day positions to remain unchanged (therefore, excluding fees, commissions, reserves, net interest income, and intraday trading) with VaR-based measures during a sample period not used in model development.
- (3) The bank must stress test the market risk of its covered positions at a frequency appropriate to each portfolio, and in no case less frequently than quarterly. The stress tests must take into account concentration risk (including but not limited to concentrations in single issuers, industries, sectors, or markets), illiquidity under stressed market conditions, and risks arising from the bank's trading activities that may not be adequately captured in its internal models.
- (4) The bank must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the bank's market risk measurement systems, including the activities of the business trading units and independent risk control unit, compliance with policies and procedures, and calculation of the bank's measures for market risk under this appendix. At least annually, the internal audit function must report its findings to the bank's board of directors (or a committee thereof).
- (e) Internal assessment of capital adequacy. The bank must have a rigorous process for assessing its overall capital adequacy in relation to its market risk. The assessment must take into account risks that may not be captured fully in the VaR-based measure, including concentration and liquidity risk under stressed market conditions.
- (f) Documentation. The bank must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, vali-

dation and review processes and results, and internal assessment of capital adequacy.

Section 4. Adjustments to the Risk-Based Capital Ratio Calculations

- (a) Risk-based capital ratio denominators. A bank must calculate its general risk-based capital ratio denominator by following the steps described in paragraphs (a)(1) through (a)(4) of this section. A bank subject to appendix C to this part must use its general risk-based capital ratio denominator for purposes of determining its total risk-based capital ratio and its tier 1 risk-based capital ratio under section 3(a)(2)(ii) and section 3(a)(3)(ii), respectively, of appendix C to this part, provided that the bank may not use the supervisory formula approach (SFA) in section 10(b)(2)(vii)(B) of this appendix for purposes of this calculation. A bank subject to appendix C to this part also must calculate an advanced risk-based capital ratio denominator by following the steps in paragraphs (a)(1) through (a)(4) of this section for purposes of determining its total risk-based capital ratio and its tier 1 risk-based capital ratio under sections 3(a)(2)(i) and section 3(a)(3)(i), respectively, of appendix C to this part.
- (1) Adjusted risk-weighted assets. (i) The bank must calculate:
- (A) General adjusted risk-weighted assets, which equals risk-weighted assets as determined in accordance with appendix A to this part with the adjustments in paragraphs (a)(1)(ii) and, if applicable, (a)(1)(iii) of this section; and
- (B) For a bank subject to appendix C to this part, advanced adjusted risk-weighted assets, which equal risk-weighted assets as determined in accordance with appendix C to this part with the adjustments in paragraph (a)(1)(i) of this section.
- (ii) For purposes of calculating its general and advanced adjusted risk-weighted assets under paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of this section, respectively, the bank must exclude the risk-weighted asset amounts of all covered positions (except foreign exchange positions that are not trading positions and over-the-counter derivative positions).
- (iii) For purposes of calculating its general adjusted risk-weighted assets under paragraph (a)(1)(i)(A) of this section, a bank may exclude receivables that arise from the posting of cash collateral and are associated with qualifying securities borrowing transactions to the extent the receivable is collateralized by the market value of the borrowed securities.
- (2) Measure for market risk. The bank must calculate the general measure for market risk (except, as provided in paragraph (a) of this section, that the bank may not use the SFA in section 10(b)(2)(vii)(B) of this appendix for purposes of this calculation), which

equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for de minimis exposures all as defined under this paragraph (a)(2). A bank subject to appendix C to this part also must calculate the advanced measure for market risk, which equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for de minimis exposures as defined under this paragraph (a)(2).

- (i) VaR-based capital requirement. A bank's VaR-based capital requirement equals the greater of:
- (A) The previous day's VaR-based measure as calculated under section 5 of this appendix: or
- (B) The average of the daily VaR-based measures as calculated under section 5 of this appendix for each of the preceding 60 business days multiplied by three, except as provided in paragraph (b) of this section.
- (ii) Stressed VaR-based capital requirement. A bank's stressed VaR-based capital requirement equals the greater of:
- (A) The most recent stressed VaR-based measure as calculated under section 6 of this appendix; or
- (B) The average of the stressed VaR-based measures as calculated under section 6 of this appendix for each of the preceding 12 weeks multiplied by three, except as provided in paragraph (b) of this section.
- (iii) Specific risk add-ons. A bank's specific risk add-ons equal any specific risk add-ons that are required under section 7 of this appendix and are calculated in accordance with section 10 of this appendix.
- (iv) Incremental risk capital requirement. A bank's incremental risk capital requirement equals any incremental risk capital requirement as calculated under section 8 of this appendix.
- (v) Comprehensive risk capital requirement. A bank's comprehensive risk capital requirement equals any comprehensive risk capital requirement as calculated under section 9 of this appendix.
- (vi) Capital requirement for de minimis exposures. A bank's capital requirement for de minimis exposures equals:
- (A) The absolute value of the market value of those *de minimis* exposures that are not captured in the bank's VaR-based measure or under paragraph (a)(2)(vi)(B) of this section; and
- (B) With the prior written approval of the OCC, the capital requirement for any *de minimis* exposures using alternative techniques that appropriately measure the market risk associated with those exposures.

- (3) Market risk equivalent assets. The bank must calculate general market risk equivalent assets as the general measure for market risk (as calculated in paragraph (a)(2) of this section) multiplied by 12.5. A bank subject to appendix C to this part also must calculate advanced market risk equivalent assets as the advanced measure for market risk (as calculated in paragraph (a)(2) of this section) multiplied by 12.5.
- (4) Denominator calculation. (i) The bank must add general market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to general adjusted risk-weighted assets (as calculated in paragraph (a)(1)(i) of this section). The resulting sum is the bank's general risk-based capital ratio denominator.
- (ii) A bank subject to appendix C to this part must add advanced market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to advanced adjusted riskweighted assets (as calculated in paragraph (a)(1)(i) of this section). The resulting sum is the bank's advanced risk-based capital ratio denominator.
- (b) Backtesting. A bank must compare each of its most recent 250 business days' trading losses (excluding fees, commissions, reserves, net interest income, and intraday trading) with the corresponding daily VaR-based measures calibrated to a one-day holding period and at a one-tail, 99.0 percent confidence level. A bank must begin backtesting as required by this paragraph no later than one year after the later of January 1, 2013, and the date on which the bank becomes subject to this appendix. In the interim, consistent with safety and soundness principles, a bank subject to this appendix as of its effective date should continue to follow backtesting procedures in accordance with the OCC's supervisory expectations.
- (1) Once each quarter, the bank must identify the number of exceptions (that is, the number of business days for which the actual daily net trading loss, if any, exceeds the corresponding daily VaR-based measure) that have occurred over the preceding 250 business days.
- (2) A bank must use the multiplication factor in table 1 of this appendix that corresponds to the number of exceptions identified in paragraph (b)(1) of this section to determine its VaR-based capital requirement for market risk under paragraph (a)(2)(i) of this section and to determine its stressed VaR-based capital requirement for market risk under paragraph (a)(2)(ii) of this section until it obtains the next quarter's backtesting results, unless the OCC notifies the bank in writing that a different adjustment or other action is appropriate.

TABLE 1—MULTIPLICATION FACTORS BASED ON RESULTS OF BACKTESTING

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

Section 5. VaR-Based Measure

- (a) General requirement. A bank must use one or more internal models to calculate daily a VaR-based measure of the general market risk of all covered positions. The daily VaR-based measure also may reflect the bank's specific risk for one or more portfolios of debt and equity positions, if the internal models meet the requirements of paragraph (b)(1) of section 7 of this appendix. The daily VaR-based measure must also reflect the bank's specific risk for any portfolio of correlation trading positions that is modeled under section 9 of this appendix. A bank may elect to include term repo-style transactions in its VaR-based measure, provided that the bank includes all such term repo-style transactions consistently time.
- (1) The bank's internal models for calculating its VaR-based measure must use risk factors sufficient to measure the market risk inherent in all covered positions. The market risk categories must include, as appropriate, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk. For material positions in the major currencies and markets, modeling techniques must incorporate enough segments of the yield curve—in no case less than six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.
- (2) The VaR-based measure may incorporate empirical correlations within and across risk categories, provided the bank validates and demonstrates the reasonableness of its process for measuring correlations. If the VaR-based measure does not incorporate empirical correlations across risk categories, the bank must add the separate measures from its internal models used to calculate the VaR-based measure for the appropriate market risk categories (interest rate risk, credit spread risk, equity price risk, foreign exchange rate risk, and/or commodity price risk) to determine its aggregate VaR-based measure.
- (3) The VaR-based measure must include the risks arising from the nonlinear price characteristics of options positions or positions with embedded optionality and the sensitivity of the market value of the positions

to changes in the volatility of the underlying rates, prices, or other material risk factors. A bank with a large or complex options portfolio must measure the volatility of options positions or positions with embedded optionality by different maturities and/or strike prices, where material.

- (4) The bank must be able to justify to the satisfaction of the OCC the omission of any risk factors from the calculation of its VaR-based measure that the bank uses in its pricing models.
- (5) The bank must demonstrate to the satisfaction of the OCC the appropriateness of any proxies used to capture the risks of the bank's actual positions for which such proxies are used.
- (b) Quantitative requirements for VaR-based measure. (1) The VaR-based measure must be calculated on a daily basis using a one-tail, 99.0 percent confidence level, and a holding period equivalent to a 10-business-day movement in underlying risk factors, such as rates, spreads, and prices. To calculate VaRbased measures using a 10-business-day holding period, the bank may calculate 10-business-day measures directly or may convert VaR-based measures using holding periods other than 10 business days to the equivalent of a 10-business-day holding period. A bank that converts its VaR-based measure in such a manner must be able to justify the reasonableness of its approach to the satisfaction of the OCC.
- (2) The VaR-based measure must be based on a historical observation period of at least one year. Data used to determine the VaR-based measure must be relevant to the bank's actual exposures and of sufficient quality to support the calculation of risk-based capital requirements. The bank must update data sets at least monthly or more frequently as changes in market conditions or portfolio composition warrant. For a bank that uses a weighting scheme or other method for the historical observation period, the bank must either:
- (i) Use an effective observation period of at least one year in which the average time lag of the observations is at least six months; or
- (ii) Demonstrate to the OCC that its weighting scheme is more effective than a weighting scheme with an average time lag of at least six months representing the volatility of the bank's trading portfolio over a full business cycle. A bank using this option must update its data more frequently than monthly and in a manner appropriate for the type of weighting scheme.
- (c) A bank must divide its portfolio into a number of significant subportfolios approved by the OCC for subportfolio backtesting purposes. These subportfolios must be sufficient to allow the bank and the OCC to assess the adequacy of the VaR model at the risk factor level; the OCC will evaluate the appropriateness of these subportfolios relative to the

value and composition of the bank's covered positions. The bank must retain and make available to the OCC the following information for each subportfolio for each business day over the previous two years (500 business days), with no more than a 60-day lag:

- (1) A daily VaR-based measure for the subportfolio calibrated to a one-tail, 99.0 percent confidence level:
- (2) The daily profit or loss for the subportfolio (that is, the net change in price of the positions held in the portfolio at the end of the previous business day): and
- (3) The p-value of the profit or loss on each day (that is, the probability of observing a profit that is less than, or a loss that is greater than, the amount reported for purposes of paragraph (c)(2) of this section based on the model used to calculate the VaRbased measure described in paragraph (c)(1) of this section).

Section 6. Stressed VaR-Based Measure

- (a) General requirement. At least weekly, a bank must use the same internal model(s) used to calculate its VaR-based measure to calculate a stressed VaR-based measure.
- (b) Quantitative requirements for stressed VaR-based measure. (1) A bank must calculate a stressed VaR-based measure for its covered positions using the same model(s) used to calculate the VaR-based measure, subject to the same confidence level and holding period applicable to the VaR-based measure under section 5 of this appendix, but with model inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the bank's current portfolio.
- (2) The stressed VaR-based measure must be calculated at least weekly and be no less than the bank's VaR-based measure.
- (3) A bank must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the bank's stressed VaR-based measure under this section and must be able to provide empirical support for the period used. The bank must obtain the prior approval of the OCC for, and notify the OCC if the bank makes any material changes to, these policies and procedures. The policies and procedures must address:
- (i) How the bank links the period of significant financial stress used to calculate the stressed VaR-based measure to the composition and directional bias of its current portfolio; and
- (ii) The bank's process for selecting, reviewing, and updating the period of significant financial stress used to calculate the stressed VaR-based measure and for monitoring the appropriateness of the period to the bank's current portfolio.
- (4) Nothing in this section prevents the OCC from requiring a bank to use a different period of significant financial stress in the

calculation of the stressed VaR-based measure

Section 7. Specific Risk

- (a) General requirement. A bank must use one of the methods in this section to measure the specific risk for each of its debt, equity, and securitization positions with specific risk.
- (b) Modeled specific risk. A bank may use models to measure the specific risk of covered positions as provided in paragraph (a) of section 5 of this appendix (therefore, excluding securitization positions that are not modeled under section 9 of this appendix). A bank must use models to measure the specific risk of correlation trading positions that are modeled under section 9 of this appendix.
- (1) Requirements for specific risk modeling. (i) If a bank uses internal models to measure the specific risk of a portfolio, the internal models must:
- (A) Explain the historical price variation in the portfolio;
- (B) Be responsive to changes in market conditions:
- (C) Be robust to an adverse environment, including signaling rising risk in an adverse environment: and
- (D) Capture all material components of specific risk for the debt and equity positions in the portfolio. Specifically, the internal models must:
- (1) Capture event risk and idiosyncratic risk:
- (2) Capture and demonstrate sensitivity to material differences between positions that are similar but not identical and to changes in portfolio composition and concentrations.
- (ii) If a bank calculates an incremental risk measure for a portfolio of debt or equity positions under section 8 of this appendix, the bank is not required to capture default and credit migration risks in its internal models used to measure the specific risk of those portfolios.
- (2) Specific risk fully modeled for one or more portfolios. If the bank's VaR-based measure captures all material aspects of specific risk for one or more of its portfolios of debt, equity, or correlation trading positions, the bank has no specific risk add-on for those portfolios for purposes of paragraph (a)(2)(iii) of section 4 of this appendix.
- (c) Specific risk not modeled.
- (1) If the bank's VaR-based measure does not capture all material aspects of specific risk for a portfolio of debt, equity, or correlation trading positions, the bank must calculate a specific-risk add-on for the portfolio under the standardized measurement method as described in section 10 of this appendix.
- (2) A bank must calculate a specific risk add-on under the standardized measurement

method as described in section 10 of this appendix for all of its securitization positions that are not modeled under section 9 of this appendix.

Section 8. Incremental Risk

- (a) General requirement. A bank that measures the specific risk of a portfolio of debt positions under section 7(b) of this appendix using internal models must calculate at least weekly an incremental risk measure for that portfolio according to the requirements in this section. The incremental risk measure is the bank's measure of potential losses due to incremental risk over a oneyear time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions. With the prior approval of the OCC, a bank may choose to include portfolios of equity positions in its incremental risk model, provided that it consistently includes such equity positions in a manner that is consistent with how the bank internally measures and manages the incremental risk of such positions at the portfolio level. If equity positions are included in the model, for modeling purposes default is considered to have occurred upon the default of any debt of the issuer of the equity position. A bank may not include correlation trading positions or securitization positions in its incremental risk measure.
- (b) Requirements for incremental risk modeling. For purposes of calculating the incremental risk measure, the incremental risk model must:
- (1) Measure incremental risk over a oneyear time horizon and at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.
- (i) A constant level of risk assumption means that the bank rebalances, or rolls over, its trading positions at the beginning of each liquidity horizon over the one-year horizon in a manner that maintains the bank's initial risk level. The bank must determine the frequency of rebalancing in a manner consistent with the liquidity horizons of the positions in the portfolio. The liquidity horizon of a position or set of positions is the time required for a bank to reduce its exposure to, or hedge all of its material risks of, the position(s) in a stressed market. The liquidity horizon for a position or set of positions may not be less than the shorter of three months or the contractual maturity of the position.
- (ii) A constant position assumption means that the bank maintains the same set of positions throughout the one-year horizon. If a bank uses this assumption, it must do so consistently across all portfolios.
- (iii) A bank's selection of a constant position or a constant risk assumption must be consistent between the bank's incremental

- risk model and its comprehensive risk model described in section 9 of this appendix, if applicable.
- (iv) A bank's treatment of liquidity horizons must be consistent between the bank's incremental risk model and its comprehensive risk model described in section 9 of this appendix, if applicable.
- (2) Recognize the impact of correlations between default and migration events among obligors.
- (3) Reflect the effect of issuer and market concentrations, as well as concentrations that can arise within and across product classes during stressed conditions.
- (4) Reflect netting only of long and short positions that reference the same financial instrument.
- (5) Reflect any material mismatch between a position and its hedge.
- (6) Recognize the effect that liquidity horizons have on dynamic hedging strategies. In such cases, a bank must:
- (i) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions:
- (ii) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;
- (iii) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and
- (iv) Capture in the incremental risk model any residual risks arising from such hedging strategies.
- (7) Reflect the nonlinear impact of options and other positions with material nonlinear behavior with respect to default and migration changes.
- (8) Maintain consistency with the bank's internal risk management methodologies for identifying, measuring, and managing risk.
- (c) Calculation of incremental risk capital requirement. The incremental risk capital requirement is the greater of:
- (1) The average of the incremental risk measures over the previous 12 weeks; or
- (2) The most recent incremental risk measure.

Section 9. Comprehensive Risk

- (a) General requirement. (1) Subject to the prior approval of the OCC, a bank may use the method in this section to measure comprehensive risk, that is, all price risk, for one or more portfolios of correlation trading positions.
- (2) A bank that measures the price risk of a portfolio of correlation trading positions using internal models must calculate at least weekly a comprehensive risk measure that captures all price risk according to the requirements of this section. The comprehensive risk measure is either:
- (i) The sum of:

- (A) The bank's modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; and
- (B) A surcharge for the bank's modeled correlation trading positions equal to the total specific risk add-on for such positions as calculated under section 10 of this appendix multiplied by 8.0 percent; or
- (ii) With approval of the OCC and provided the bank has met the requirements of this section for a period of at least one year and can demonstrate the effectiveness of the model through the results of ongoing model validation efforts including robust benchmarking, the greater of:
- (A) The bank's modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; or
- (B) The total specific risk add-on that would apply to the bank's modeled correlation trading positions as calculated under section 10 of this appendix multiplied by 8.0 percent.
- (b) Requirements for modeling all price risk. If a bank uses an internal model to measure the price risk of a portfolio of correlation trading positions:
- (1) The internal model must measure comprehensive risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.
- (2) The model must capture all material price risk, including but not limited to the following:
- (i) The risks associated with the contractual structure of cash flows of the position, its issuer, and its underlying exposures;
- (ii) Credit spread risk, including nonlinear price risks;
- (iii) The volatility of implied correlations, including nonlinear price risks such as the cross-effect between spreads and correlations:
 - (iv) Basis risk;
- (v) Recovery rate volatility as it relates to the propensity for recovery rates to affect tranche prices; and
- (vi) To the extent the comprehensive risk measure incorporates the benefits of dynamic hedging, the static nature of the hedge over the liquidity horizon must be recognized. In such cases, a bank must:
- (A) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;
- (B) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;
- (C) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and

- (D) Capture in the comprehensive risk model any residual risks arising from such hedging strategies;
- (3) The bank must use market data that are relevant in representing the risk profile of the bank's correlation trading positions in order to ensure that the bank fully captures the material risks of the correlation trading positions in its comprehensive risk measure in accordance with this section; and
- (4) The bank must be able to demonstrate that its model is an appropriate representation of comprehensive risk in light of the historical price variation of its correlation trading positions.
 - (c) Requirements for stress testing.
- (1) A bank must at least weekly apply specific, supervisory stress scenarios to its portfolio of correlation trading positions that capture changes in:
- (i) Default rates;
- (ii) Recovery rates;
- (iii) Credit spreads;
- (iv) Correlations of underlying exposures;
- (v) Correlations of a correlation trading position and its hedge.
- (2) Other requirements. (i) A bank must retain and make available to the OCC the results of the supervisory stress testing, including comparisons with the capital requirements generated by the bank's comprehensive risk model.
- (ii) A bank must report to the OCC promptly any instances where the stress tests indicate any material deficiencies in the comprehensive risk model.
- (d) Calculation of comprehensive risk capital requirement. The comprehensive risk capital requirement is the greater of:
- (1) The average of the comprehensive risk measures over the previous 12 weeks; or
- (2) The most recent comprehensive risk measure.

Section 10. Standardized Measurement Method for Specific Risk

(a) General requirement. A bank must calculate a total specific risk add-on for each portfolio of debt and equity positions for which the bank's VaR-based measure does not capture all material aspects of specific risk and for all securitization positions that are not modeled under section 9 of this appendix. A bank must calculate each specific risk add-on in accordance with the requirements of this section. Notwithstanding any other definition or requirement in this appendix, a position that would have qualified as a debt position or an equity position but for the fact that it qualifies as a correlation trading position under paragraph (2) of the definition of correlation trading position. shall be considered a debt position or an equity position, respectively, for purposes of this section 10.

- (1) The specific risk add-on for an individual debt or securitization position that represents sold credit protection is capped at the notional amount of the credit derivative contract. The specific risk add-on for an individual debt or securitization position that represents purchased credit protection is capped at the current market value of the transaction plus the absolute value of the present value of all remaining payments to the protection seller under the transaction. This sum is equal to the value of the protection leg of the transaction.
- (2) For debt, equity, or securitization positions that are derivatives with linear payoffs, a bank must assign a specific riskweighting factor to the market value of the effective notional amount of the underlying instrument or index portfolio, except for a securitization position for which the bank directly calculates a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section. A swap must be included as an effective notional position in the underlying instrument or portfolio, with the receiving side treated as a long position and the paying side treated as a short position. For debt. equity, or securitization positions that are derivatives with nonlinear payoffs, a bank must risk weight the market value of the effective notional amount of the underlying instrument or portfolio multiplied by the derivative's delta.
- (3) For debt, equity, or securitization positions, a bank may net long and short positions (including derivatives) in identical issues or identical indices. A bank may also net positions in depositary receipts against an opposite position in an identical equity in different markets, provided that the bank includes the costs of conversion.
- (4) A set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge has a specific risk add-on of zero if:
- (i) The debt or securitization position is fully hedged by a total return swap (or similar instrument where there is a matching of swap payments and changes in market value of the debt or securitization position);
- (ii) There is an exact match between the reference obligation of the swap and the debt or securitization position;
- (iii) There is an exact match between the currency of the swap and the debt or securitization position; and
- (iv) There is either an exact match between the maturity date of the swap and the maturity date of the debt or securitization position; or, in cases where a total return swap references a portfolio of positions with different maturity dates, the total return swap maturity date must match the maturity date of the underlying asset in that portfolio that has the latest maturity date.

- (5) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of paragraph (a)(4) of this section is equal to 20.0 percent of the capital requirement for the side of the transaction with the higher specific risk add-on when:
- (i) The credit risk of the position is fully hedged by a credit default swap or similar instrument:
- (ii) There is an exact match between the reference obligation of the credit derivative hedge and the debt or securitization position:
- (iii) There is an exact match between the currency of the credit derivative hedge and the debt or securitization position; and
- (iv) There is either an exact match between the maturity date of the credit derivative hedge and the maturity date of the debt or securitization position; or, in the case where the credit derivative hedge has a standard maturity date:
- (A) The maturity date of the credit derivative hedge is within 30 business days of the maturity date of the debt or securitization position; or
- (B) For purchased credit protection, the maturity date of the credit derivative hedge is later than the maturity date of the debt or securitization position, but is no later than the standard maturity date for that instrument that immediately follows the maturity date of the debt or securitization position. The maturity date of the credit derivative hedge may not exceed the maturity date of the debt or securitization position by more than 90 calendar days.
- (6) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of either paragraph (a)(4) or (a)(5) of this section, but in which all or substantially all of the price risk has been hedged, is equal to the specific risk add-on for the side of the transaction with the higher specific risk add-on.
- (b) Debt and securitization positions. (1) The total specific risk add-on for a portfolio of debt or securitization positions is the sum of the specific risk add-ons for individual debt or securitization positions, as computed under this section. To determine the specific risk add-on for individual debt or securitization positions, a bank must multiply the absolute value of the current market value of each net long or net short debt or securitization position in the portfolio by the appropriate specific risk-weighting factor as set forth in paragraphs (b)(2)(i) through (b)(2)(vii) of this section.

- (2) For the purpose of this section, the appropriate specific risk-weighting factors include:
- (i) Sovereign debt positions. (A) In general. A bank must assign a specific risk-weighting factor to a sovereign debt position based on the CRC applicable to the sovereign entity

and, as applicable, the remaining contractual maturity of the position, in accordance with table 2. Sovereign debt positions that are backed by the full faith and credit of the United States are treated as having a CRC of 0

TABLE 2—SPECIFIC RISK-WEIGHTING FACTORS FOR SOVEREIGN DEBT POSITIONS

		Specific risk-weighting factor	Percent
	0–1		0.0
		Remaining contractual maturity of 6 months or less.	0.25
CRC of Sovereign	2–3	Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months.	1.6
	4–6		8.0
	7		12.0
No CRC			8.0
Default by the Sovereign Entity			12.0

- (B) Notwithstanding paragraph (b)(2)(i)(A) of this section, a bank may assign to a sovereign debt position a specific risk-weighting factor that is lower than the applicable specific risk-weighting factor in table 2 if:
- (1) The position is denominated in the sovereign entity's currency;
- (2) The bank has at least an equivalent amount of liabilities in that currency; and
- (3) The sovereign entity allows banks under its jurisdiction to assign the lower specific risk-weighting factor to the same exposures to the sovereign entity.
- (C) A bank must assign a 12.0 percent specific risk-weighting factor to a sovereign debt position immediately upon determination that a default has occurred; or if a default has occurred within the previous five years.
- (D) A bank must assign an 8.0 percent specific risk-weighting factor to a sovereign debt position if the sovereign entity does not have a CRC assigned to it, unless the sovereign debt position must be assigned a higher specific risk-weighting factor under paragraph (b)(2)(i)(C) of this section.

- (ii) Certain supranational entity and multilateral development bank debt positions. A bank may assign a 0.0 percent specific risk-weighting factor to a debt position that is an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, or an MDB.
- (iii) GSE debt positions. A bank must assign a 1.6 percent specific risk-weighting factor to a debt position that is an exposure to a GSE. Notwithstanding the foregoing, a bank must assign an 8.0 percent specific risk-weighting factor to preferred stock issued by a GSE.
- (iv) Depository institution, foreign bank, and credit union debt positions. (A) Except as provided in paragraph (b)(2)(iv)(B) of this section, a bank must assign a specific risk-weighting factor to a debt position that is an exposure to a depository institution, a foreign bank, or a credit union using the specific risk-weighting factor that corresponds to that entity's sovereign of incorporation and, as applicable, the remaining contractual maturity of the position, in accordance with table 3.

TABLE 3—SPECIFIC RISK-WEIGHTING FACTORS FOR DEPOSITORY INSTITUTION, FOREIGN BANK, AND CREDIT UNION DEBT POSITIONS

		Specific risk-weighting factor	Percent
		Remaining contractual maturity of 6 months or less.	0.25
CRC of Sovereign	0–2	Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0

TABLE 3—SPECIFIC RISK-WEIGHTING FACTORS FOR DEPOSITORY INSTITUTION, FOREIGN BANK, AND CREDIT UNION DEBT POSITIONS—Continued

0.12511			
		Remaining contractual maturity exceeds 24 months.	1.6
	3		8.0
	4–7		12.0
No CRC			8.0
Default by the Sovereign Entity			12.0

(B) A bank must assign a specific risk-weighting factor of 8.0 percent to a debt position that is an exposure to a depository institution or a foreign bank that is includable in the depository institution's or foreign bank's regulatory capital and that is not subject to deduction as a reciprocal holding under the appendix A to this part.

(C) A bank must assign a 12.0 percent specific risk-weighting factor to a debt position that is an exposure to a foreign bank immediately upon determination that a default by the foreign bank's sovereign of incorporation has occurred or if a default by the foreign bank's sovereign of incorporation has occurred within the previous five years.

(v) PSE debt positions. (A) Except as provided in paragraph (b)(2)(v)(B) of this section, a bank must assign a specific risk-weighting factor to a debt position that is an exposure to a PSE based on the specific risk-weighting factor that corresponds to the PSE's sovereign of incorporation and to the

position's categorization as a general obligation or revenue obligation and, as applicable, the remaining contractual maturity of the position, as set forth in tables 4 and 5.

(B) A bank may assign a lower specific risk-weighting factor than would otherwise apply under tables 4 and 5 to a debt position that is an exposure to a foreign PSE if:

(1) The PSE's sovereign of incorporation allows banks under its jurisdiction to assign a lower specific risk-weighting factor to such position; and

(2) The specific risk-weighting factor is not lower than the risk weight that corresponds to the PSE's sovereign of incorporation in accordance with tables 4 and 5.

(C) A bank must assign a 12.0 percent specific risk-weighting factor to a PSE debt position immediately upon determination that a default by the PSE's sovereign of incorporation has occurred or if a default by the PSE's sovereign of incorporation has occurred within the previous five years.

TABLE 4—SPECIFIC RISK-WEIGHTING FACTORS FOR PSE GENERAL OBLIGATION DEBT POSITIONS

		General obligation specific risk-weighting factor (in percent)	Percent
		Remaining contractual maturity of 6 months or less.	0.25
CRC of Sovereign	0–2	Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months.	1.6
	3		8.0
4–7	4–7		12.0
No CRC			8.0
Default by the Sovereign Entity			12.0

TABLE 5—SPECIFIC RISK-WEIGHTING FACTORS FOR PSE REVENUE OBLIGATION DEBT POSITIONS

	Revenue obligation specific risk-weighting factor	Percent
	Remaining contractual maturity of 6 months or less.	0.25

Table 5—Specific Risk-Weighting Factors for PSE Revenue Obligation Debt Positions— Continued

CRC of Sovereign	0–1	Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months.	1.6
	2–3		8.0
	4–7		12.0
No CRC			8.0
Default by the Sovereign Entity			12.0

(vi) Corporate debt positions. Except as otherwise provided in paragraph (b)(2)(vi)(B), a bank must assign a specific risk-weighting factor to a corporate debt position in accordance with the investment grade methodology in paragraph (b)(2)(vi)(A) of this section.

(A) Investment grade methodology. (1) For corporate debt positions that are exposures to entities that have issued and outstanding

publicly traded instruments, a bank must assign a specific risk-weighting factor based on the category and remaining contractual maturity of the position, in accordance with table 6. For purposes of this paragraph (A), the bank must determine whether the position is in the investment grade or not investment grade category.

TABLE 6—SPECIFIC RISK-WEIGHTING FACTORS FOR CORPORATE DEBT POSITIONS UNDER THE INVESTMENT GRADE METHODOLOGY

Category	Remaining contractual maturity	Specific risk- weighting factor (in percent)
Investment Grade	6 months or less	0.50
	Greater than 6 and up to and including 24 months	2.00
	Greater than 24 months	4.00
Not-investment Grade		12.00

- (2) A bank must assign an 8.0 percent specific risk-weighting factor for corporate debt positions that are exposures to entities that do not have publicly traded instruments outstanding.
- (B) Limitations. (I) A bank must assign a specific risk-weighting factor of at least 8.0 percent to an interest-only mortgage-backed security that is not a securitization position.
- (2) A bank shall not assign a corporate debt position a specific risk-weighting factor that is lower than the specific risk-weighting factor that corresponds to the CRC of the issuer's sovereign of incorporation in table 1.
- (vii) Securitization positions. (A) General requirements. (I) A bank that does not use the appendix C to this part must assign a specific risk-weighting factor to a securitization position using either the simplified supervisory formula approach (SSFA) in accordance with section 11 of this appendix or assign a specific risk-weighting factor of 100 percent to the position.
- (2) A bank that uses appendix C to this part must calculate a specific risk add-on for a securitization position using the SFA in
- section 45 of appendix C to this part and in accordance with paragraph (b)(2)(vii)(B) of this section if the bank and the securitization position each qualifies to use the SFA under appendix C to this part. A bank that uses appendix C to this part and that has a securitization position that does not qualify for the SFA may assign a specific risk-weighting factor to the securitization position using the SSFA in accordance with section 11 of this appendix or assign a specific risk-weighting factor of 100 percent to the position.
- (3) A bank must treat a short securitization position as if it is a long securitization position solely for calculation purposes when using the SFA in paragraph (b)(2)(vii)(B) or the SSFA in section 11 of this appendix.
- (B) SFA. To calculate the specific risk addon for a securitization position using the SFA, a bank that is subject to appendix C to this part must set the specific risk addon for the position equal to the risk-based capital requirement, calculated under section 45 of appendix C to this part.

- (C) SSFA. To use the SSFA to determine the specific risk-weighting factor for a securitization position, a bank must calculate the specific risk-weighting factor in accordance with section 11 of this appendix.
- (D) Nth-to-default credit derivatives. A bank must determine a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B), or assign a specific risk-weighting factor using the SSFA in section 11 of this appendix to an nth-to-default credit derivative in accordance with this paragraph (D), irrespective of whether the bank is a net protection buyer or net protection seller. A bank must determine its position in the nth-to-default credit derivative as the largest notional dollar amount of all the underlying exposures.
- (1) For purposes of determining the specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) or the specific risk-weighting factor for an nth-to-default credit derivative using the SSFA in section 11 of this appendix, the bank must calculate the attachment point and detachment point of its position as follows:
- (i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the bank's position to the total notional amount of all underlying exposures. For purposes of using the SFA to calculate the specific add-on for its position in an nthto-default credit derivative, parameter A must be set equal to the credit enhancement level (L) input to the SFA formula. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the bank's position. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the bank's position.
- (ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the bank's position in the nth-to-default credit derivative to the total notional amount of all underlying exposures. For purposes of using the SFA to calculate the specific risk add-on for its position in an nth-to-default credit derivative, parameter D must be set to equal L plus the thickness of tranche (T) input to the SFA formula.
- (2) A bank that does not use the SFA to determine a specific risk-add on, or the SSFA to determine a specific risk-weighting factor for its position in an nth-to-default credit derivative must assign a specific risk-weighting factor of 100 percent to the position.
- (c) Modeled correlation trading positions. For purposes of calculating the comprehensive risk measure for modeled correlation trading positions under either paragraph (a)(2)(i) or (a)(2)(ii) of section 9 of this appendix, the total specific risk add-on is the greater of:

- (1) The sum of the bank's specific risk addons for each net long correlation trading position calculated under this section; or
- (2) The sum of the bank's specific risk addons for each net short correlation trading position calculated under this section.
- (d) Non-modeled securitization positions. For securitization positions that are not correlation trading positions and for securitizations that are correlation trading positions not modeled under section 9 of this appendix, the total specific risk add-on is the greater of:
- (1) The sum of the bank's specific risk addons for each net long securitization position calculated under this section; or
- (2) The sum of the bank's specific risk addons for each net short securitization position calculated under this section.
- (e) Equity positions. The total specific risk add-on for a portfolio of equity positions is the sum of the specific risk add-ons of the individual equity positions, as computed under this section. To determine the specific risk add-on of individual equity positions, a bank must multiply the absolute value of the current market value of each net long or net short equity position by the appropriate specific risk-weighting factor as determined under this paragraph:
- (1) The bank must multiply the absolute value of the current market value of each net long or net short equity position by a specific risk-weighting factor of 8.0 percent. For equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the absolute value of the current market value of each net long or net short position is multiplied by a specific risk-weighting factor of 2.0 percent. 46
- (2) For equity positions arising from the following futures-related arbitrage strategies, a bank may apply a 2.0 percent specific risk-weighting factor to one side (long or short) of each position with the opposite side exempt from an additional capital requirement:
- (i) Long and short positions in exactly the same index at different dates or in different market centers; or
- (ii) Long and short positions in index contracts at the same date in different, but similar indices.
- (3) For futures contracts on main indices that are matched by offsetting positions in a basket of stocks comprising the index, a bank may apply a 2.0 percent specific risk-weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the

⁴⁶ A portfolio is well-diversified if it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value.

basket of stocks is comprised of stocks representing at least 90.0 percent of the capitalization of the index. A main index refers to the Standard & Poor's 500 Index, the FTSE All-World Index, and any other index for which the bank can demonstrate to the satisfaction of the OCC that the equities represented in the index have liquidity, depth of market, and size of bid-ask spreads comparable to equities in the Standard & Poor's 500 Index and FTSE All-World Index.

- (f) Due diligence requirements. (1) A bank must demonstrate to the satisfaction of the OCC a comprehensive understanding of the features of a securitization position that would materially affect the performance of the position by conducting and documenting the analysis set forth in paragraph (f)(2) of this section. The bank's analysis must be commensurate with the complexity of the securitization position and the materiality of the position in relation to capital.
- (2) To support the demonstration of its comprehensive understanding, for each securitization position a bank must:
- (i) Conduct an analysis of the risk characteristics of a securitization position prior to acquiring the position and document such analysis within three business days after acquiring the position, considering:
- (A) Structural features of the securitization that would materially impact the performance of the position, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, the performance of organizations that service the position, and deal-specific definitions of default:
- (B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s):
- (C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and
- (D) For resecuritization positions, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and
- (ii) On an on-going basis (no less frequently than quarterly), evaluate, review, and update as appropriate the analysis required under paragraph (f)(1) of this section for each securitization position.

Section 11. Simplified Supervisory Formula
Approach

- (a) General requirements. To use the SSFA to determine the specific risk-weighting factor for a securitization position, a bank must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data and no more than 91 calendar days old. A bank that does not have the appropriate data to assign the parameters described and defined, for purposes of this section, in paragraph (b) of this section must assign a specific risk-weighting factor of 100 percent to the position.
- (b) SSFA parameters. To calculate the specific risk-weighting factor for a securitization position using the SSFA, a bank must have accurate information on the five inputs to the SSFA calculation described in paragraphs (b)(1) through (b)(5) of this section:
- (1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using appendix A to this part. K_G is expressed as a decimal value between zero and 1 (that is, an average risk weight of 100 percent represents a value of K_G equal to .08).
- (2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures within the securitized pool that meet any of the criteria as set forth in paragraphs (i) through (vi) of this paragraph (b)(2) to the ending balance, measured in dollars, of underlying exposures:
- (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;
- (iii) In the process of foreclosure;
- (iv) Held as real estate owned;
- (v) Has contractually deferred interest payments for 90 days or more; or
- (vi) Is in default.
- (3) Parameter A is the attachment point for the position, which represents the threshold at which credit losses will first be allocated to the position. Parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the position of the bank to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the position that contains the bank's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

- (4) Parameter D is the detachment point for the position, which represents the threshold at which credit losses of principal allocated to the position would result in a total loss of principal. Parameter D equals parameter A plus the ratio of the current dollar amount of the securitization positions that are pari passu with the position (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.
- (5) A supervisory calibration parameter, p, is equal to 0.5 for securitization positions that are not resecuritization positions and equal to 1.5 for resecuritization positions.
- (c) Mechanics of the SSFA. K_G and W are used to calculate K_A , the augmented value of K_G , which reflects the observed credit quality of the underlying pool of exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D, relative to K_A determine the specific risk-weighting factor assigned to a position as described in this paragraph and paragraph (d) of this section.
- The specific risk-weighting factor assigned to a securitization position, or portion of a position, as appropriate, is the larger of the specific risk-weighting factor determined in accordance with this paragraph and paragraph (d) of this section and a specific risk-weighting factor of 1.6 percent.
- (1) When the detachment point, parameter D, for a securitization position is less than or equal to $K_{\rm A}$, the position must be assigned a specific risk-weighting factor of 100 percent.
- (2) When the attachment point, parameter A, for a securitization position is greater than or equal to K_A , the bank must calculate the specific risk-weighting factor in accordance with paragraph (d) of this section.
- (3) When A is less than K_A and D is greater than K_A , the specific risk-weighting factor is a weighted-average of 1.00 and $K_{\rm SSFA}$ calculated in accordance with paragraph (d) of this section, but with the parameter A revised to be set equal to K_A . For the purpose of this weighted-average calculation:

- (i) The weight assigned to 1.00 equals $\frac{\mathbf{K_A A}}{\mathbf{D A}}$.
- (ii) The weight assigned to K_{SSFA} equals $\frac{D-K_A}{D-A}$. The specific risk-weighting factor will be set equal to:

$$SRWF = 100 \times \left[\left(\frac{K_A - A}{D - A} \right) \times 1.00 \right] + \left[\left(\frac{D}{D - A} \right) \times K_{SSFA} \right]$$

(d) SSFA equation. (1) The [bank] must define the following parameters:

$$K_{\mathcal{A}} = (1 - W) \cdot K_{\mathcal{O}} + (0.5 \cdot W)$$

$$a = -\frac{1}{p \cdot K_A}$$

$$u = D - K_3$$

$$l = A - K_A$$

 $\epsilon = 2.71628$, the base of the natural logarithms.

(2) Then the [bank] must calculate K_{SSFA} according to the following equation:

$$K_{SSFA} = \frac{e^{au} - e^{al}}{a(u - l)}$$

(3) The specific risk-weighting factor for the position (expressed as a percent) is equal to $K_{SSFA} \times 100$.

Section 12. Market Risk Disclosures

(a) Scope. A bank must comply with this section unless it is a consolidated subsidiary of a bank holding company or a depository institution that is subject to these requirements or of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction. A bank must make quantitative disclosures publicly each calendar quarter. If a significant change occurs, such that the most recent reporting amounts are no longer reflective of the bank's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be provided as soon as practicable thereafter. Qualitative disclosures that typically do not change each

quarter may be disclosed annually, provided any significant changes are disclosed in the interim. If a bank believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public certain information that is either proprietary or confidential in nature, the bank is not required to disclose these specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

(b) Disclosure policy. The bank must have a formal disclosure policy approved by the board of directors that addresses the bank's approach for determining its market risk

disclosures. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management must ensure that appropriate verification of the disclosures takes place and that effective internal controls and disclosure controls and procedures are maintained. One or more senior officers of the bank must attest that the disclosures meet the requirements of this appendix, and the board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this section.

- (c) Quantitative disclosures.
- (1) For each material portfolio of covered positions, the bank must disclose publicly the following information at least quarterly:
- (i) The high, low, and mean VaR-based measures over the reporting period and the VaR-based measure at period-end;
- (ii) The high, low, and mean stressed VaRbased measures over the reporting period and the stressed VaR-based measure at periodend:
- (iii) The high, low, and mean incremental risk capital requirements over the reporting period and the incremental risk capital requirement at period-end;
- (iv) The high, low, and mean comprehensive risk capital requirements over the reporting period and the comprehensive risk capital requirement at period-end, with the period-end requirement broken down into appropriate risk classifications (for example, default risk, migration risk, correlation risk):
- (v) Separate measures for interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk used to calculate the VaR-based measure; and
- (vi) A comparison of VaR-based estimates with actual gains or losses experienced by the bank, with an analysis of important outliers.
- (2) In addition, the bank must disclose publicly the following information at least quarterly:
- (i) The aggregate amount of on-balance sheet and off-balance sheet securitization positions by exposure type; and
- (ii) The aggregate amount of correlation trading positions.
- (d) Qualitative disclosures. For each material portfolio of covered positions, the bank must disclose publicly the following information at least annually, or more frequently in the event of material changes for each portfolio:
- (1) The composition of material portfolios of covered positions:
- (2) The bank's valuation policies, procedures, and methodologies for covered positions including, for securitization positions,

the methods and key assumptions used for valuing such positions, any significant changes since the last reporting period, and the impact of such change;

- (3) The characteristics of the internal models used for purposes of this appendix. For the incremental risk capital requirement and the comprehensive risk capital requirement, this must include:
- (i) The approach used by the bank to determine liquidity horizons;
- (ii) The methodologies used to achieve a capital assessment that is consistent with the required soundness standard; and
- (iii) The specific approaches used in the validation of these models;
- (4) A description of the approaches used for validating and evaluating the accuracy of internal models and modeling processes for purposes of this appendix;
- (5) For each market risk category (that is, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk), a description of the stress tests applied to the positions subject to the factor:
- (6) The results of the comparison of the bank's internal estimates for purposes of this appendix with actual outcomes during a sample period not used in model development:
- (7) The soundness standard on which the bank's internal capital adequacy assessment under this appendix is based, including a description of the methodologies used to achieve a capital adequacy assessment that is consistent with the soundness standard;
- (8) A description of the bank's processes for monitoring changes in the credit and market risk of securitization positions, including how those processes differ for resecuritization positions; and
- (8) A description of the bank's policy governing the use of credit risk mitigation to mitigate the risks of securitization and resecuritization positions.

[77 FR 53112, Aug. 30, 2012]

PART 4—ORGANIZATION AND FUNCTIONS, AVAILABILITY AND RELEASE OF INFORMATION, CONTRACTING OUTREACH PROGRAM, POST-EMPLOYMENT RESTRICTIONS FOR SENIOR EXAMINERS

Subpart A—Organization and Functions

Sec.

- 4.1 Purpose.
- 4.2 Office of the Comptroller of the Currency.
- 4.3 Comptroller of the Currency.
- 4.4 Washington office and web site.